

March 24, 2006

Peter Van Alyea
Redwood Oil Company
50 Professional Center Drive, Suite 100
Rohnert Park, CA 94928

Ground Water Monitoring Report
January 2006
Redwood Oil Company Bulk Plant
455 Yolanda Avenue
Santa Rosa, California
ECM Project #98-507-14

Dear Mr. Van Alyea:

This report provides the results of the semi-annual ground water monitoring at the Redwood Oil Company Bulk Plant, located at 455 Yolanda Avenue in Santa Rosa, California (Figure 1, Attachment A). ECM group personnel conducted ground water monitoring at the site between January 23 and February 1, 2006. Ground water elevations were measured in seventeen of the conventional wells (MW-1 through MW-5, MW-5A, MW-7 through MW-12, MW-15, MW-16, MW-18, MW-19 and MW-20) and ten multilevel wells (MW-21 through MW-30) (Figure 2, Attachment A). Ground water samples were collected from wells MW-1 through MW-4, MW-7, MW-9, MW-10, and each sample port in the multilevel wells MW-21 through MW-30. Ground water samples were collected in accordance with the site monitoring schedule.

Free-phase hydrocarbons were not observed in any of the wells. Well heads and well vaults were observed to be in good condition. Water level data and well construction details are provided in Tables 1 and 2 (Attachment B) and a ground water elevation contour map is included as Figure 2 (Attachment A). Purge water and decon rinseate were disposed of in the site remedial system holding tank for treatment and permitted discharge.

Samples were forwarded under chain of custody record to Friedman & Bruya, Inc., of Seattle, Washington for analysis. Analytic results for ground water are presented in Tables 3 through 6 (Attachment B). Ground water samples were collected in accordance with ECM Standard Operating Procedure - Ground Water Sampling (Attachment E). The chain of custody documents and laboratory analytic reports are included in Attachment C. Water Sampling Data Sheets are included in Attachment D.

Analytical results for samples collected during this sampling event were typical of previous events. Ground water flow and gradient were consistent with historical measurements, trending to the south as an approximate gradient of 0.01 ft/ft.

MW-1, MW-2, MW-3, MW-4, MW-7, MW-10, MW-21, MW-22

Wells MW-1 through MW-4, MW-7, MW-10, and MW-21 are located on-site. Conventional wells MW-3, MW-10 and the multi-level well MW-21 represent the most impacted area of the site. High concentrations of petroleum hydrocarbons and fuel oxygenates have been consistently detected in samples from these wells. Significant concentrations of petroleum hydrocarbons and fuel oxygenates have typically been present in samples collected from each port in MW-21 at depths up to 165 ft. Analytical results from samples collected during the January 2006 monitoring event were consistent with historical analytical results for samples from wells MW-3, MW-10, and each sample port of MW-21.

Conventional monitoring wells MW-1 and MW-2 are located on-site, upgradient from the most impacted area of the site. Conventional monitoring wells MW-4 and MW-7 and multi-level well MW-22 are located on-site, downgradient of the most impacted area of the site. Samples from MW-1, MW-2, MW-4, and MW-7 have been consistently impacted with petroleum hydrocarbons and fuel oxygenates. Contaminant concentrations in samples from these wells are typically lower than concentrations in samples from wells MW-3, MW-10 and MW-21.

Samples from each port of MW-22 have been impacted with fuel oxygenates at concentrations consistent with samples from MW-21. Diesel has been detected in samples from MW-22 at depths up to 175 ft. No other petroleum hydrocarbons have been detected below the 22 ft port in samples from well MW-22. Analytical results of samples collected during the January 2006 monitoring event from wells MW-1, MW-2, MW-4, MW-7, and each sample port of MW-22 were consistent with historical results.

MW-25 and MW-27

Multi-level well MW-25 is located off site to the east and multi-level well MW-27 is located off-site to the west. Contaminant concentrations in each sample port from MW-25 and MW-27 are typically very low or below detection limits. Sample ports are located up to a depth of 230 feet in each well. Very low concentrations of the oxygenate TBA were detected in samples from the 145 ft and 230 ft ports in MW-25 and the 75 ft port in MW-27. Trace concentrations of the oxygenate DIPE were detected in the samples from the 145 ft, 180 ft, and 230 ft ports in MW-25 and the 145 ft port in MW-27. No other analytes were detected in any of the samples from wells MW-25 and MW-27.

MW-23, MW-24, MW-26, MW-28, MW-29, and MW-30

Multi-level wells MW-23, MW-24, MW-26, MW-28, MW-29, and MW-30 are located off-site in the downgradient direction. Contaminant concentrations are typically lower in these wells than on-site wells. Analytical results from this sampling event were consistent with historical results.

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MTBE was detected in the samples from each sample port of wells MW-23, MW-24, and MW-30. Concentrations were greatest in the samples from the 25 ft sample ports and lower in samples from ports screened at greater depths. TBA, TAME, and DIPE were also detected in several of the samples at lower concentrations. Samples from well MW-23 were analyzed for gasoline, diesel, motor oil, and BTEX compounds. Low concentrations of diesel and motor oil were detected only in the sample from the sample port screened at 25 ft. No gasoline or BTEX compounds were detected in any of the samples from MW-23.

Low concentrations of the oxygenate TBA were detected in the sample ports up to 180 ft in the wells located the greatest distance down-gradient of the site (MW-26, MW-28, and MW-29). No other analytes were detected in any of the samples from these wells.

Thank you for the opportunity to provide services to Redwood Oil Company. Please call if you have any questions.

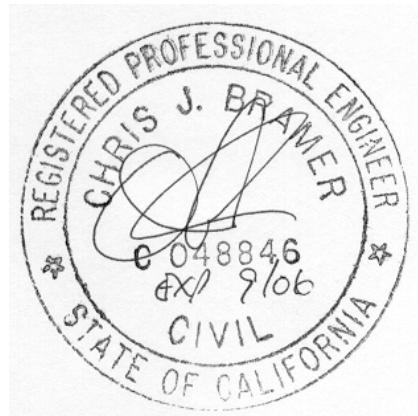
Sincerely,
ECM group



David Hazard
Environmental Scientist



Chris Bramer
Professional Engineer #C048846

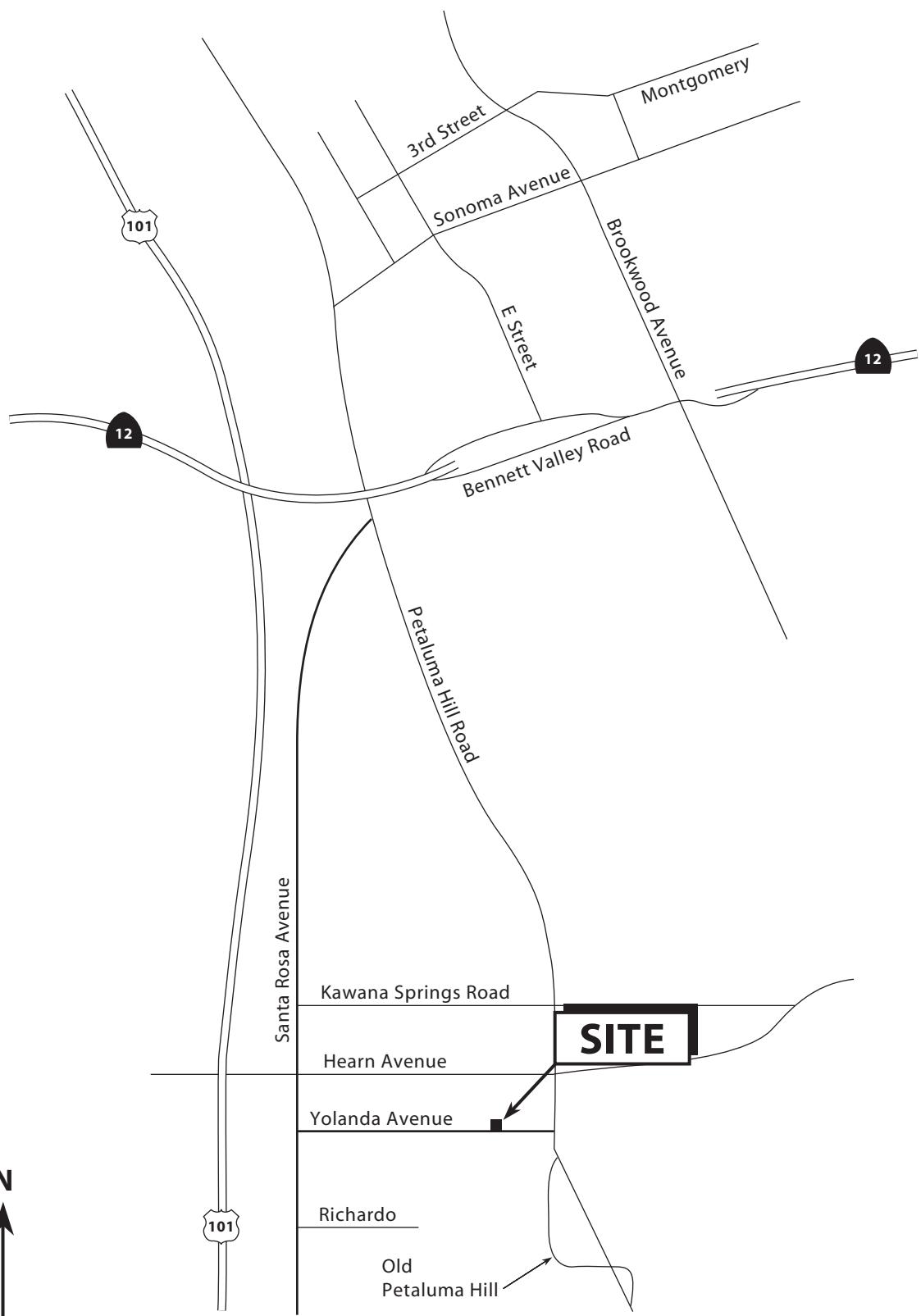


- Attachments:
- A - Figures
 - B - Tables
 - C - Chain of Custody Documents and Laboratory Analytic Report
 - D - Water Sampling Data Sheets
 - E - Standard Operating Procedures

cc: Joan Fleck, North Coast Regional Water Quality Control Board
C:\ECMQMs\50714.Jan06QM

APPENDIX A

FIGURES



Base map reference: Thomas Bros.

Figure 1. Site Location Map - Redwood Oil Service Station, 455 Yolanda Avenue, Santa Rosa, California

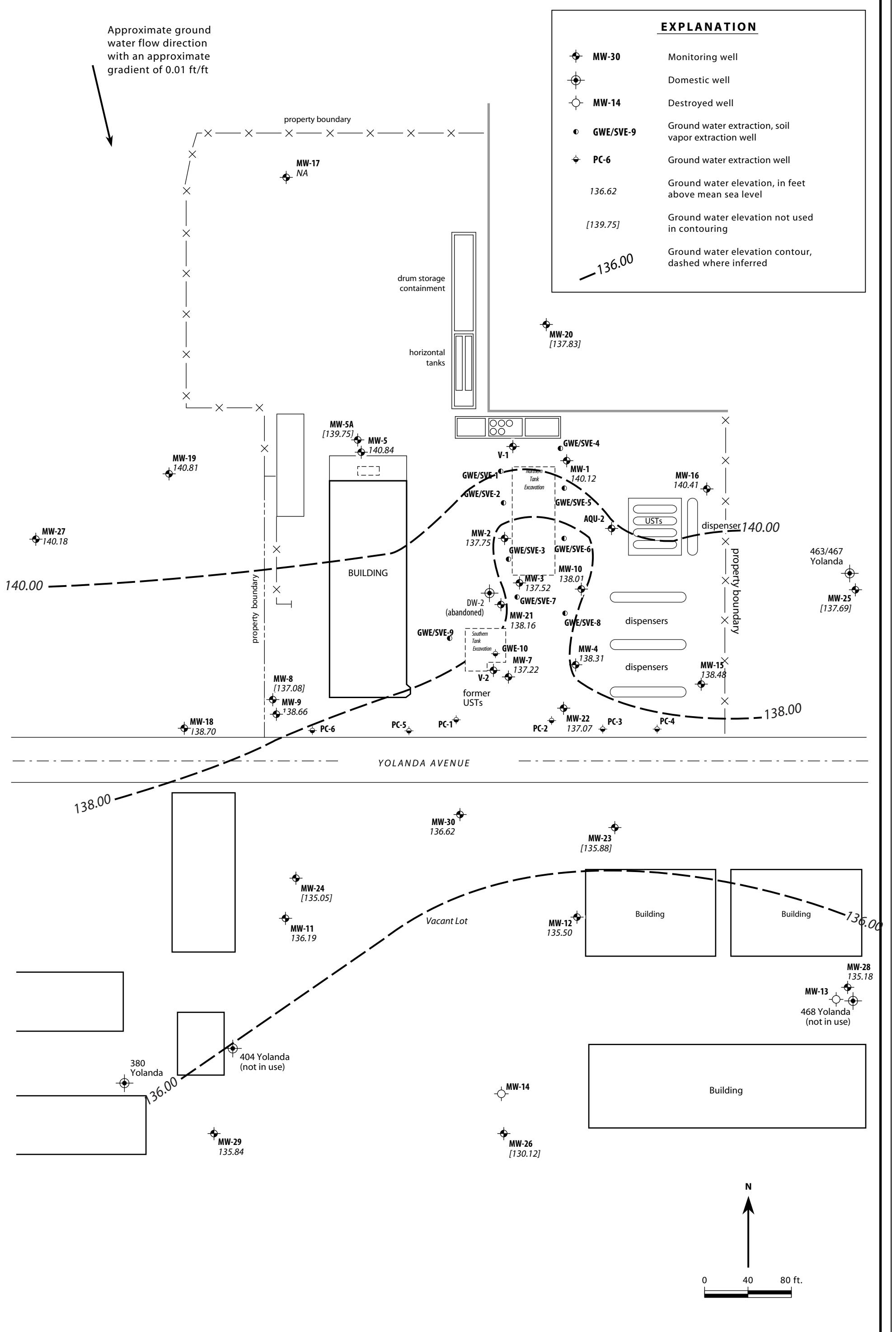


Figure 2. Monitoring Well Locations and Ground Water Elevation Contour Map - February 1, 2006 - Redwood Oil Bulk Plant, 455 Yolanda Avenue, Santa Rosa, California

APPENDIX B

TABLES

Table 1. Water Level Data/Well Construction Details - Redwood Oil Bulk Plant, 455 Yolanda Ave. Santa Rosa, CA

Well ID	Sample Date	DTW (Ft)	TOC (Ft, msl)	GWE (Ft, msl)	Product (ft)	Screen Interval	Sand Pack Interval	Bentonite/Grout Interval	Notes
MW-1	01/11/91	---	102.77	---	--	9 - 24	7 - 24	0 - 7	
	02/08/91	---		---	---				
	03/08/91	---		---	---				
	06/13/91	22.02		80.75	0.00				
	07/09/91	22.22		80.55	0.00				
	08/01/91	22.00		80.77	0.00				
	08/29/91	21.73		81.04	0.00				
	09/11/91	21.75		81.02	0.00				
	10/08/91	22.04		80.73	0.00				
	11/08/91	22.23		80.54	0.00				
	12/11/91	---		---	0.00				
	01/13/92	21.41		81.36	0.00				
	02/11/92	20.25		82.52	0.00				
	03/11/92	12.79		89.98	0.00				
	04/13/92	13.76		89.01	0.00				
	05/15/92	15.49		87.28	0.00				
	06/15/92	16.85		85.92	0.00				
	07/16/92	17.74		85.03	0.00				
	08/18/92	17.56		85.21	0.00				
	09/18/92	18.62		84.15	0.00				
	12/08/92	18.38		84.39	0.00				
	03/10/93	13.29		89.48	0.00				
	06/04/93	12.77		90.00	0.00				
	10/14/93	23.66	102.78	79.11	0.00				
	04/11/94	14.58		88.19	0.00				
	10/19/94	14.51		88.26	0.00				
	04/11/95	9.18		93.59	0.00				
	03/06/96	10.16		92.61	0.00				
	10/14/96	12.36		90.42	0.00				Top of casing elevations re-surveyed.
	04/09/97	10.75		92.03	0.00				
	10/29/97	13.28		89.50	0.00				
	04/07/98	8.06		94.72	0.00				
	10/07/98	11.51		91.27	0.00				
	04/07/99	8.71		94.07	0.00				

Table 1. Water Level Data/Well Construction Details - Redwood Oil Bulk Plant, 455 Yolanda Ave. Santa Rosa, CA

Well ID	Sample Date	DTW (Ft)	TOC (Ft, msl)	GWE (Ft, msl)	Product (ft)	Screen Interval	Sand Pack Interval	Bentonite/ Grout Interval	Notes
MW-1	10/19/99	11.98	102.78 146.16 148.81	90.80	0.00	9 - 24	7 - 24	0 - 7	
	04/26/00	---		---	0.00				Well inaccessible due to construction activities.
	10/30/00	11.41		134.75	0.00				Top of casing elevations re-surveyed.
	02/01/01	11.28		134.88	0.00				
	04/23/01	14.29		131.87	0.00				
	07/23/01	14.88		131.28	0.00				
	10/23/01	16.46		129.70	0.00				
	01/21/02	12.77		136.04	0.00				Top of casing elevations were surveyed for EDF compliance.
	04/25/02	12.80		136.01	0.00				
	07/22/02	13.20		135.61	0.00				
	10/22/02	13.76		135.05	0.00				
	01/27/03	13.00		135.81	0.00				
	04/21/03	12.85		135.96	0.00				
	07/21/03	13.36		135.45	0.00				
	01/20/04	10.04		138.77	0.00				
	07/19/04	13.04		135.77	0.00				
	01/18/05	9.96		138.85	0.00				
	07/12/05	9.40		139.41	0.00				
	02/01/06	8.69		140.12	0.00				
MW-2	01/11/91	21.36	102.18	80.82	0.00	10 - 25	7.5 - 25	0 - 7.5	
	02/08/91	18.24		83.94	0.00				
	03/08/91	16.52		85.66	0.00				
	06/13/91	20.95		81.23	0.00				
	07/09/91	20.98		81.20	0.00				
	08/01/91	20.98		81.20	0.00				
	08/29/91	21.28		80.90	0.00				
	09/11/91	21.36		80.82	0.00				
	10/08/91	21.83		80.25	0.22				
	11/08/91	20.56		81.62	0.00				
	12/11/91	21.08		81.10	0.00				
	01/13/92	18.56		83.62	0.00				
	02/11/92	14.30		87.88	0.00				

Table 1. Water Level Data/Well Construction Details - Redwood Oil Bulk Plant, 455 Yolanda Ave. Santa Rosa, CA

Well ID	Sample Date	DTW (Ft)	TOC (Ft, msl)	GWE (Ft, msl)	Product (ft)	Screen Interval	Sand Pack Interval	Bentonite/ Grout Interval	Notes
MW-2	03/11/92	11.81	102.18	90.37	0.00	10 - 25	7.5 - 25	0 - 7.5	
	04/13/92	13.23		88.95	0.00				
	05/15/92	15.09		87.09	0.00				
	06/15/92	16.95		85.23	0.00				
	07/16/92	17.96		84.22	0.00				
	08/18/92	17.76		84.42	0.00				
	09/18/92	18.75		83.43	0.00				
	12/08/92	14.66		87.52	0.00				
	03/10/93	12.80		89.38	0.00				
	06/04/93	13.25		88.93	0.00				
	10/14/93	16.20		85.98	0.00				
	04/11/94	14.85		87.33	0.00				
	10/19/94	15.04		87.14	0.00				
	04/11/95	9.77		92.41	0.00				
	03/06/96	10.12		92.06	0.00				
	10/14/96	12.45		89.74	0.00				
	04/10/97	10.79		91.40	0.00				
	10/28/97	13.32		88.87	0.00				
	04/07/98	8.02		94.17	0.00				
	10/07/98	11.64		90.55	0.00				
	04/07/99	8.79		93.40	0.00				
	10/19/99	12.05		90.14	0.00				
	04/26/00	---		---	---				Well inaccessible due to construction activities.
	10/30/00	10.80	145.32	134.52	0.00				Top of casing elevations re-surveyed.
	02/01/01	10.70		134.62	0.00				
	04/23/01	13.74		131.58	0.00				
	07/23/01	14.22		131.10	0.00				
	10/23/01	16.04		129.28	0.00				
	01/21/02	13.36		134.61	0.00				
	04/25/02	13.80		134.17	0.00				
	07/22/02	13.81		134.16	0.00				
	10/22/02	13.82		134.15	0.00				
	01/27/03	13.18	147.97	134.79	0.00				Top of casing elevations were surveyed for EDF compliance.

Table 1. Water Level Data/Well Construction Details - Redwood Oil Bulk Plant, 455 Yolanda Ave. Santa Rosa, CA

Well ID	Sample Date	DTW (Ft)	TOC (Ft, msl)	GWE (Ft, msl)	Product (ft)	Screen Interval	Sand Pack Interval	Bentonite/ Grout Interval	Notes
MW-2	04/21/03	12.34	147.97	135.63	0.00	10 - 25	7.5 - 25	0 - 7.5	
	07/21/03	13.01		134.96	0.00				
	01/20/04	11.81		136.16	0.00				
	07/19/04	12.84		135.13	0.00				
	01/18/05	11.14		136.83	0.00				
	07/12/05	11.02		136.95	0.00				
	02/01/06	10.22		137.75	0.00				
MW-3	01/11/91	---	101.94	---	---	18 - 33	17 - 33	0 - 17	
	02/08/91	---		---	---				
	03/08/91	28.28		73.66	0.00				
	06/13/91	---		---	---				
	07/09/91	---		---	---				
	08/01/91	---		---	---				
	08/29/91	---		---	---				
	09/11/91	---		---	---				
	10/08/91	---		---	---				
	11/08/91	---		---	---				
	12/11/91	---		---	---				
	01/13/92	---		---	---				
	02/11/92	18.82		83.12	0.00				
	03/11/92	11.76		90.18	0.00				
	04/13/92	12.25		89.69	0.00				
	05/15/92	15.35		86.59	0.00				
	06/15/92	17.61		84.33	0.00				
	07/16/92	19.86		82.08	0.00				
	08/18/92	19.66		82.28	0.00				
	10/18/92	26.00		75.94	0.00				
	12/08/92	17.24		84.70	0.00				
	03/10/93	14.60		87.34	0.00				
	06/04/93	13.95		87.99	0.00				
	10/14/93	---		---	---				
	04/11/94	16.58		85.36	0.00				
	10/19/94	16.01		85.93	0.00				

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Well ID	Sample Date	DTW (Ft)	TOC (Ft, msl)	GWE (Ft, msl)	Product (ft)	Screen Interval	Sand Pack Interval	Bentonite/ Grout Interval	Notes
MW-3	04/11/95	11.12	101.94	90.82	0.00	18 - 33	17 - 33	0 - 17	
	03/06/96	11.72		90.22	0.00				
	10/14/96	13.94		88.03	0.00				
	04/10/97	12.08		89.90	0.01				
	10/29/97	16.02		85.99	0.02				
	04/07/98	9.97		92.00	0.00				
	10/07/98	12.66		89.31	0.00				
	04/07/99	9.70		92.27	0.00				
	10/19/99	13.15		88.82	0.00				
	04/26/00	---		---	---				Well inaccessible due to construction activities.
	10/30/00	---	145.10	---	---				Well plugged at seven feet, no water.
	02/01/01	12.33		132.77	0.00				
	04/23/01	---		---	---				Well was inaccessible
	07/23/01	14.98		130.12	0.00				
	10/23/01	17.00		128.10	0.00				
	01/21/02	13.67	147.75	134.08	0.00				Top of casing elevations were surveyed for EDF compliance.
	04/25/02	14.50		133.25	0.00				
	07/22/02	14.96		132.79	0.00				
	10/22/02	15.22		132.53	0.00				
	01/27/03	14.21		133.54	0.00				
	04/21/03	13.47		134.28	0.00				
	07/21/03	14.43		133.32	0.00				
	01/20/04	12.00		135.75	0.00				
	07/19/04	14.03		133.72	0.00				
	01/18/05	11.11		136.64	0.00				
	07/12/05	11.68		136.07	0.00				
	02/01/06	10.23		137.52	0.00				
MW-4	01/11/91	---	101.47	---	---	10 - 25	7 - 25	0 - 7	
	02/08/91	---		---	---				
	03/08/91	---		---	---				
	06/13/91	---		---	---				
	07/09/91	---		---	---				

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Well ID	Sample Date	DTW (Ft)	TOC (Ft, msl)	GWE (Ft, msl)	Product (ft)	Screen Interval	Sand Pack Interval	Bentonite/ Grout Interval	Notes
MW-4	08/01/91	---	101.47	---	---	10 - 25	7 - 25	0 - 7	
	08/29/91	---		---	---				
	09/11/91	---		---	---				
	10/08/91	---		---	---				
	11/08/91	---		---	---				
	12/11/91	---		---	---				
	01/13/92	24.47		77.00	0.00				
	02/11/92	26.06		75.41	0.00				
	03/11/92	23.46		78.01	0.00				
	04/13/92	24.25		77.22	0.00				
	05/15/92	---		---	---				
	06/15/92	---		---	---				
	07/16/92	---		---	---				
	08/18/92	---		---	---				
	09/18/92	---		---	---				
	12/08/92	---		---	---				
	03/10/93	---		---	---				
	06/04/93	---		---	---				
	10/14/93	---		---	---				
	04/11/94	---		---	---				
	10/19/94	---		---	---				
	04/11/95	---		---	---				
	03/06/96	16.52	101.70	84.95	0.00				
	10/14/96	20.39		81.31	0.00				
	04/10/97	16.02		85.68	0.00				
	10/29/97	21.61		80.09	0.00				
	04/07/98	11.30		90.40	0.00				
	10/07/98	15.53		86.17	0.00				
	04/07/99	11.95		89.75	0.00				
	10/19/99	15.15		86.55	0.00				
	04/26/00	10.38		91.32	0.00				
	06/01/00	---		---	---				
	10/30/00	13.78	145.47	131.69	0.00				Top of casing elevations were surveyed.
	02/01/01	13.41		132.06	0.00				

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Well ID	Sample Date	DTW (Ft)	TOC (Ft, msl)	GWE (Ft, msl)	Product (ft)	Screen Interval	Sand Pack Interval	Bentonite/Grout Interval	Notes
MW-4	04/23/01	19.27	145.47	126.20	0.00	10 - 25	7 - 25	0 - 7	Top of casing elevations were surveyed for EDF compliance.
	07/23/01	17.65		127.82	0.00				
	10/23/01	19.88		125.59	0.00				
	01/21/02	13.62		134.50	0.00				
	04/25/02	14.47		133.65	0.00				
	07/22/02	15.57		132.55	0.00				
	10/22/02	17.23		130.89	0.00				
	01/27/03	13.00		135.12	0.00				
	04/21/03	13.42		134.70	0.00				
	07/21/03	14.15		133.97	0.00				
	01/20/04	11.67		136.45	0.00				
	07/19/04	14.47		133.65	0.00				
	01/18/05	11.31		136.81	0.00				
	07/12/05	11.53		136.59	0.00				
	02/01/06	9.81		138.31	0.00				
MW-5	06/13/91	25.84	101.37	75.53	0.00	34.5 - 44.5	32.5 - 44.5	0 - 32.5	
	07/09/91	25.98		75.39	0.00				
	08/01/91	23.22		78.15	0.00				
	08/29/91	22.79		78.58	0.00				
	09/11/91	22.58		78.79	0.00				
	10/08/91	27.46		73.91	0.00				
	11/08/91	24.36		77.01	0.00				
	12/11/91	23.35		78.02	0.00				
	01/13/92	23.96		77.41	0.00				
	02/11/92	23.67		77.70	0.00				
	03/11/92	22.01		79.36	0.00				
	04/13/92	21.50		79.87	0.00				
	05/15/92	18.96		82.41	0.00				
	06/15/92	18.72		82.65	0.00				
	07/16/92	19.88		81.49	0.00				
	08/18/92	19.38		81.99	0.00				
	09/18/92	19.60		81.77	0.00				

Table 1. Water Level Data/Well Construction Details - Redwood Oil Bulk Plant, 455 Yolanda Ave. Santa Rosa, CA

Well ID	Sample Date	DTW (Ft)	TOC (Ft, msl)	GWE (Ft, msl)	Product (ft)	Screen Interval	Sand Pack Interval	Bentonite/Grout Interval	Notes
MW-5	12/08/92	20.04	101.37	81.33	0.00	34.5 - 44.5	32.5 - 44.5	0 - 32.5	
	03/10/93	16.60		84.77	0.00				
	06/04/93	15.96		85.41	0.00				
	10/14/93	18.68		82.69	0.00				
	04/11/94	14.46		86.91	0.00				
	10/19/94	15.56		85.81	0.00				
	04/11/95	9.52		91.85	0.00				
	03/06/96	10.60		90.77	0.00				
	10/14/96	11.81		89.53	0.00				
	04/09/97	10.08		91.26	0.00				
	10/29/97	15.05		86.29	0.00				
	04/07/98	8.01		93.33	0.00				
	10/07/98	9.82		91.52	0.00				
	04/07/99	9.12		92.22	0.00				
	10/19/99	12.96		88.38	0.00				
	04/26/00	9.28		92.06	0.00				
	10/30/00	---	145.73	---	---				Well inaccessible due to area flooding
	02/01/01	11.52		134.21	0.00				
	04/23/01	15.25		130.48	0.00				
	07/23/01	13.22		132.51	0.00				
	10/23/01	13.15		132.58	0.00				
	01/21/02	12.50	148.38	135.88	0.00				Top of casing elevations were surveyed for EDF compliance.
	04/25/02	12.02		136.36	0.00				
	07/22/02	11.00		137.38	0.00				
	10/22/02	11.40		136.98	0.00				
	01/27/03	10.78		137.60	0.00				
	04/21/03	9.15		139.23	0.00				
	01/20/04	8.00		140.38	0.00				
	07/19/04	10.53		137.85	0.00				
	01/18/05	10.09		138.29	0.00				
	07/12/05	7.11		141.27	0.00				
	02/01/06	7.54		140.84	0.00				

Table 1. Water Level Data/Well Construction Details - Redwood Oil Bulk Plant, 455 Yolanda Ave. Santa Rosa, CA

Well ID	Sample Date	DTW (Ft)	TOC (Ft, msl)	GWE (Ft, msl)	Product (ft)	Screen Interval	Sand Pack Interval	Bentonite/ Grout Interval	Notes
MW-5A	10/14/96	11.80	101.37	89.57	0.00	50 - 60	49 - 60	0 - 49	
	04/10/97	10.16		91.21	0.00				
	10/29/97	16.80		84.57	0.00				
	04/07/98	9.64		91.73	0.00				
	10/07/98	10.09		91.28	0.00				
	04/07/99	7.55		93.82	0.00				
	10/19/99	---		---	---				Well casing was damaged.
	04/26/00	7.58		93.79	0.00				
	10/30/00	---	145.70	---	---				Well inaccessible due to area flooding
	02/01/01	11.17		134.53	0.00				
	04/23/01	11.75		133.95	0.00				
	07/23/01	12.58		133.12	0.00				
	10/23/01	13.71		131.99	0.00				
	01/21/02	12.55	148.35	135.80	0.00	51 - 60	49 - 60	0 - 49	Top of casing elevations were surveyed for EDF compliance.
	04/25/02	11.45		136.90	0.00				
	07/22/02	10.75		137.60	0.00				
	10/22/02	10.90		137.45	0.00				
	01/27/03	10.31		138.04	0.00				
	04/21/03	10.35		138.00	0.00				
	07/19/04	10.03		138.32	0.00				
	01/18/05	10.15		138.20	0.00				
	07/12/05	8.42		139.93	0.00				
	02/01/06	8.60		139.75	0.00				
MW-7	06/13/91	34.93	100.86	65.93	0.00	51 - 60	49 - 60	0 - 49	
	07/09/91	35.05		65.81	0.00				
	08/01/91	35.76		65.10	0.00				
	08/29/91	37.28		63.58	0.00				
	09/11/91	36.71		64.15	0.00				
	10/08/91	36.59		64.27	0.00				
	11/08/91	36.31		64.55	0.00				
	12/11/91	36.55		63.31	0.00				
	01/13/92	37.03		63.83	0.00				

Table 1. Water Level Data/Well Construction Details - Redwood Oil Bulk Plant, 455 Yolanda Ave. Santa Rosa, CA

Well ID	Sample Date	DTW (Ft)	TOC (Ft, msl)	GWE (Ft, msl)	Product (ft)	Screen Interval	Sand Pack Interval	Bentonite/ Grout Interval	Notes
MW-7	02/11/92	36.20	100.86	64.66	0.00	51 - 60	49 - 60	0 - 49	
	03/11/92	34.51		66.35	0.00				
	04/13/92	33.85		67.01	0.00				
	05/15/92	33.04		67.82	0.00				
	06/15/92	35.53		65.33	0.00				
	07/16/92	35.42		65.44	0.00				
	08/18/92	35.03		65.83	0.00				
	09/18/92	35.52		65.34	0.00				
	12/08/92	34.36		66.50	0.00				
	03/10/93	30.21		70.65	0.00				
	06/04/93	29.33		71.53	0.00				
	10/14/93	32.23		68.63	0.00				
	04/11/94	28.87		71.99	0.00				
	10/19/94	31.19		69.67	0.00				
	04/11/95	22.49		78.37	0.00				
	03/06/96	21.44		79.42	0.00				
	10/14/96	---	101.03	---	---				Top of casing elevations re-surveyed.
	04/09/97	20.67		80.36	0.00				
	10/29/97	24.71		76.32	0.00				
	04/07/98	16.96		84.07	0.00				
	10/07/98	19.46		81.57	0.00				
	04/07/99	15.27		85.76	0.00				
	10/19/99	18.79		82.24	0.00				
	04/26/00	13.45		87.58	0.00				
	10/30/00	17.01	144.72	127.71	0.00				Top of casing elevations re-surveyed.
	02/01/01	16.17		128.55	0.00				
	04/23/01	18.12		126.60	0.00				
	07/23/01	19.53		125.19	0.00				
	10/23/01	22.00		122.72	0.00				
MW-7	01/21/02	16.30	147.37	131.07	0.00				Top of casing elevations were resurveyed for EDF compliance.
	04/25/02	16.27		131.10	0.00				
	07/22/02	17.81		129.56	0.00				
	10/22/02	18.90		128.47	0.00				

Table 1. Water Level Data/Well Construction Details - Redwood Oil Bulk Plant, 455 Yolanda Ave. Santa Rosa, CA

Well ID	Sample Date	DTW (Ft)	TOC (Ft, msl)	GWE (Ft, msl)	Product (ft)	Screen Interval	Sand Pack Interval	Bentonite/ Grout Interval	Notes
MW-7	01/27/03	15.20	147.37	132.17	0.00	51 - 60	49 - 60	0 - 49	
	04/21/03	14.92		132.45	0.00				
	07/21/03	16.27		131.10	0.00				
	01/20/04	14.37		133.00	0.00				
	07/19/04	17.90		129.47	0.00				
	01/18/05	12.07		135.30	0.00				
	07/12/05	13.00		134.37	0.00				
	02/01/06	10.15		137.22	0.00				
MW-8	06/13/91	32.68	101.53	68.85	0.00	49 - 59	47.5 - 59	0 - 47.5	
	07/09/91	32.81		68.72	0.00				
	08/01/91	33.26		68.27	0.00				
	08/29/91	34.06		67.47	0.00				
	09/11/91	34.70		66.83	0.00				
	10/08/91	37.63		63.90	0.00				
	11/08/91	35.73		65.80	0.00				
	12/11/91	34.99		66.54	0.00				
	01/13/92	34.34		67.19	0.00				
	02/11/92	34.54		66.99	0.00				
	03/11/92	32.42		69.11	0.00				
	04/13/92	30.46		71.07	0.00				
	05/15/92	30.80		70.73	0.00				
	06/15/92	31.82		69.71	0.00				
	07/16/92	33.01		68.52	0.00				
	08/18/92	32.90		68.63	0.00				
	09/18/92	33.60		67.93	0.00				
	12/08/92	33.07		68.46	0.00				
	03/10/93	26.87		74.66	0.00				
	06/04/93	25.39		76.14	0.00				
	10/14/93	29.90		71.63	0.00				
	04/11/94	26.70		74.83	0.00				
	10/19/94	15.56		85.97	0.00				
	04/11/95	19.87		81.66	0.00				
	03/06/96	19.03		82.50	0.00				

Table 1. Water Level Data/Well Construction Details - Redwood Oil Bulk Plant, 455 Yolanda Ave. Santa Rosa, CA

Well ID	Sample Date	DTW (Ft)	TOC (Ft, msl)	GWE (Ft, msl)	Product (ft)	Screen Interval	Sand Pack Interval	Bentonite/ Grout Interval	Notes
MW-8	10/14/96	22.90	101.42	78.52	0.00	49 - 59	47.5 - 59	0 - 47.5	Top of casing elevation re-surveyed.
	04/10/97	19.06		82.36	0.00				
	10/29/97	23.91		77.51	0.00				
	04/07/98	15.15		86.27	0.00				
	10/07/98	19.02		82.40	0.00				
	04/07/99	14.39		87.03	0.00				
	10/19/99	19.40		82.02	0.00				
	04/26/00	13.78		87.64	0.00				
	10/30/00	17.90	144.85	126.95	0.00				Top of casing elevation re-surveyed.
	02/01/01	16.78		128.07	0.00				
	04/23/01	17.25		127.60	0.00				
	07/23/01	19.18		125.67	0.00				
	10/23/01	21.80		123.05	0.00				
MW-8	01/21/02	14.21	147.50	133.29	0.00				Top of casing elevations were surveyed for EDF compliance.
	04/25/02	15.82		131.68	0.00				
	07/22/02	15.50		132.00	0.00				
	10/22/02	18.70		128.80	0.00				
	01/27/03	14.85		132.65	0.00				
	04/21/03	14.80		132.70	0.00				
	07/21/03	16.30		131.20	0.00				
	01/20/04	14.31		133.19	0.00				
	07/19/04	15.65		131.85	0.00				
	01/18/05	12.65		134.85	0.00				
	02/01/06	10.42		137.08	0.00				
MW-9	10/14/96	16.40	100.29	83.89	0.00	8 - 26	7 - 26	0 - 7	
	04/10/97	12.98		87.31	0.00				
	10/29/97	16.06		84.23	0.00				
	04/07/98	10.31		89.98	0.00				
	10/07/98	14.48		85.81	0.00				
	04/07/99	10.90		89.39	0.00				
	10/19/99	14.65		82.08	0.00				
	04/26/00	11.51		88.78	0.00				

Table 1. Water Level Data/Well Construction Details - Redwood Oil Bulk Plant, 455 Yolanda Ave. Santa Rosa, CA

Well ID	Sample Date	DTW (Ft)	TOC (Ft, msl)	GWE (Ft, msl)	Product (ft)	Screen Interval	Sand Pack Interval	Bentonite/ Grout Interval	Notes
MW-9	10/30/00	14.42	144.66	130.24	0.00	8 - 26	7 - 26	0 - 7	Top of casing elevation surveyed.
	02/01/01	14.12		130.54	0.00				
	04/23/01	15.54		129.12	0.00				
	07/23/01	16.45		128.21	0.00				
	10/23/01	18.80		125.86	0.00				
	01/21/02	15.52		131.79	0.00				Top of casing elevations were surveyed for EDF compliance.
	04/25/02	14.64		132.67	0.00				
	07/22/02	17.55		129.76	0.00				
	10/22/02	16.00		131.31	0.00				
	01/27/03	13.64		133.67	0.00				
	04/21/03	13.75		133.56	0.00				
	07/21/03	14.60		132.71	0.00				
	01/20/04	13.12		134.19	0.00				
	07/19/04	14.36		132.95	0.00				
	01/18/05	11.76		135.55	0.00				
	02/01/06	8.65		138.66	0.00				
MW-10	04/10/99	12.04	102.04	0.00	0.00	5 - 20	4.5 - 20	0 - 4.5	
	10/19/99	13.33		0.00	0.00				
	04/26/00	9.55		---	0.00				
	10/30/00	10.25	145.40	135.15	0.00				Top of casing elevation surveyed.
	02/01/01	11.37		134.03	0.00				
	04/23/01	13.92		131.48	0.00				
	07/23/01	14.75		130.65	0.00				
	10/23/01	17.21		128.19	0.00				
	01/21/02	13.00	148.05	135.05	0.00				Top of casing elevations were surveyed for EDF compliance.
	04/25/02	14.05		134.00	0.00				
	07/22/02	14.30		133.75	0.00				
	10/22/02	14.70		133.35	0.00				
	01/27/03	12.62		135.43	0.00				
	04/21/03	12.81		135.24	0.00				
	07/21/03	13.75		134.30	0.00				

Table 1. Water Level Data/Well Construction Details - Redwood Oil Bulk Plant, 455 Yolanda Ave. Santa Rosa, CA

Well ID	Sample Date	DTW (Ft)	TOC (Ft, msl)	GWE (Ft, msl)	Product (ft)	Screen Interval	Sand Pack Interval	Bentonite/ Grout Interval	Notes
MW-10	01/20/04	11.71	148.05	136.34	0.00	5 - 20	4.5 - 20	0 - 4.5	
	07/19/04	13.36		134.69	0.00				
	01/18/05	10.05		138.00	0.00				
	07/12/05	11.60		136.45	0.00				
	02/01/06	10.04		138.01	0.00				
MW-11	05/08/00	18.21	101.74	83.53	0.00	15-35	13-35	0-13	
	06/07/00	19.05		82.69	0.00				
	10/30/00	23.70		122.67	0.00				Top of casing elevation surveyed.
	02/01/01	21.73		124.64	0.00				
	04/23/01	20.21		126.16	0.00				
	07/23/01	22.69		123.68	0.00				
	10/23/01	25.65		120.72	0.00				
	01/21/02	17.95	149.02	131.07	0.00				Top of casing elevations were surveyed for EDF compliance.
	04/25/02	17.35		131.67	0.00				
	07/22/02	20.10		128.92	0.00				
	10/22/02	21.91		127.11	0.00				
	01/27/03	17.32		131.70	0.00				
	04/21/03	16.36		132.66	0.00				
	07/21/03	18.08		130.94	0.00				
	01/20/04	16.27		132.75	0.00				
	07/19/04	---		---	---				
	02/01/06	12.83		136.19	0.00				
MW-12	05/08/00	20.75	101.15	80.40	0.00	10 - 30	8 - 30	0 - 8	
	06/07/00	21.25		79.90	0.00				
	10/30/00	25.43		120.95	0.00				Top of casing elevation surveyed.
	02/01/01	24.27		122.11	0.00				
	04/23/01	22.00	146.38	124.38	0.00				
	07/23/01	24.11		122.27	0.00				
	10/23/01	26.38		120.00	0.00				
	01/21/02	19.70		129.33	0.00				Top of casing elevations were surveyed for EDF compliance.

Table 1. Water Level Data/Well Construction Details - Redwood Oil Bulk Plant, 455 Yolanda Ave. Santa Rosa, CA

Well ID	Sample Date	DTW (Ft)	TOC (Ft, msl)	GWE (Ft, msl)	Product (ft)	Screen Interval	Sand Pack Interval	Bentonite/ Grout Interval	Notes
MW-12	04/25/02	18.91	149.03	130.12	0.00	10 - 30	8 - 30	0 - 8	
	07/22/02	21.21		127.82	0.00				
	10/22/02	23.98		125.05	0.00				
	01/27/03	18.75		130.28	0.00				
	04/21/03	17.81		131.22	0.00				
	07/21/03	19.71		129.32	0.00				
	01/20/04	18.43		130.60	0.00				
	07/19/04	18.39		130.64	0.00				
	01/18/05	16.94		132.09	0.00				
	02/01/06	13.53		135.50	0.00				
MW-13	05/08/00	22.60	101.81	79.21	0.00	10 - 30	8 - 30	0 - 8	
	06/07/00	23.03		78.78	0.00				
	10/30/00	27.14	147.32	120.18	0.00				Top of casing elevation surveyed.
	02/01/01	26.11		121.21	0.00				
	04/23/01	23.56		123.76	0.00				
	07/23/01	25.76		121.56	0.00				
	10/23/01	27.60		119.72	0.00				Monitoring well has been abandoned.
MW-14	05/08/00	20.37	99.77	79.40	0.00	10-30	8-30	0-8	
	06/07/00	20.72		79.05	0.00				
	10/30/00	24.61	144.96	120.35	0.00				Top of casing elevation surveyed.
	02/01/01	23.57		121.39	0.00				
	04/23/01	21.13		123.83	0.00				
	07/23/01	23.18		121.78	0.00				
	10/23/01	25.50		119.46	0.00				Monitoring well has been abandoned.
MW-15	05/08/00	13.51	---	---	0.00	8-25	7-25	0-7	
	06/07/00	13.73	101.06	87.33	0.00				
	10/30/00	14.64	145.44	130.80	0.00				Top of casing elevation surveyed.
	02/01/01	15.04		130.40	0.00				
	04/23/01	16.72		128.72	0.00				
	07/23/01	19.62		125.82	0.00				
	10/23/01	22.17		123.27	0.00				

Table 1. Water Level Data/Well Construction Details - Redwood Oil Bulk Plant, 455 Yolanda Ave. Santa Rosa, CA

Well ID	Sample Date	DTW (Ft)	TOC (Ft, msl)	GWE (Ft, msl)	Product (ft)	Screen Interval	Sand Pack Interval	Bentonite/ Grout Interval	Notes
MW-15	01/21/02	14.80	148.09	133.29	0.00	8-25	7-25	0-7	Top of casing elevations were surveyed for EDF compliance.
	04/25/02	14.88		133.21	0.00				
	07/22/02	16.47		131.62	0.00				
	10/22/02	18.84		129.25	0.00				
	01/27/03	13.88		134.21	0.00				
	04/21/03	13.31		134.78	0.00				
	07/21/03	14.11		133.98	0.00				
	01/20/04	13.15		134.94	0.00				
	07/19/04	13.12		134.97	0.00				
	01/18/05	11.58		136.51	0.00				
	07/12/05	11.23		136.86	0.00				
	02/01/06	9.61		138.48	0.00				
MW-16	05/08/00	14.85	---	---	0.00	8-25	7-25	0-7	
	06/07/00	15.53	102.58	87.05	0.00				
	10/30/00	18.77	147.68	128.91	0.00				Top of casing elevation surveyed.
	02/01/01	18.17		129.51	0.00				
	04/23/01	14.58		133.10	0.00				
	07/23/01	24.26		123.42	0.00				
	10/23/01	23.40		124.28	0.00				
	01/21/02	14.11	150.33	136.22	0.00				Top of casing elevations were surveyed for EDF compliance.
	04/25/02	13.66		136.67	0.00				
	07/22/02	17.60		132.73	0.00				
	10/22/02	18.75		131.58	0.00				
	01/27/03	12.97		137.36	0.00				
	04/21/03	13.98		136.35	0.00				
	07/21/03	14.66		135.67	0.00				
	01/20/04	12.38		137.95	0.00				
	07/19/04	13.41		136.92	0.00				
	01/18/05	11.38		138.95	0.00				
	07/12/05	11.38		138.95	0.00				
	02/01/06	9.92		140.41	0.00				

Table 1. Water Level Data/Well Construction Details - Redwood Oil Bulk Plant, 455 Yolanda Ave. Santa Rosa, CA

Well ID	Sample Date	DTW (Ft)	TOC (Ft, msl)	GWE (Ft, msl)	Product (ft)	Screen Interval	Sand Pack Interval	Bentonite/Grout Interval	Notes
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MW-17	05/08/00	7.80	103.65 148.28 150.93	95.85	0.00	8 - 25	7 - 25	0 - 7	
	06/07/00	8.51		95.14	0.00				
	10/30/00	17.00		131.28	0.00				Top of casing elevation surveyed.
	02/01/01	7.86		140.42	0.00				
	04/23/01	8.38		139.90	0.00				
	08/22/01	11.80		136.48	0.00				
	10/23/01	13.15		135.13	0.00				
	01/21/02	7.10		143.83	0.00				Top of casing elevations were surveyed for EDF compliance.
	04/25/02	6.70		144.23	0.00				
	07/22/02	---		---	---				Well was inaccessible
	10/22/02	11.31		139.62	0.00				
	01/27/03	9.55		141.38	0.00				
	04/21/03	—		—	---				Well was inaccessible
	01/20/04	—		—	---				Well was inaccessible
	07/19/04	---		---	---				
	01/17/05	---		---	---				
	07/12/05	7.07		143.86	0.00				
	02/01/06	--		--	---				Surface flooding. GW elevation not measured.
<hr/>									
MW-18	05/08/00	11.20	99.67 144.14 146.79	88.47	0.00	8 - 25	7 - 25	0 - 7	
	06/07/00	11.56		88.11	0.00				
	10/30/00	14.79		129.35	0.00				Top of casing elevation surveyed.
	02/01/01	13.91		130.23	0.00				
	04/23/01	13.30		130.84	0.00				
	07/23/01	14.71		129.43	0.00				
	10/23/01	18.15		125.99	0.00				
	01/21/02	12.15		134.64	0.00				Top of casing elevations were surveyed for EDF compliance.
	04/25/02	12.29		134.50	0.00				
	07/22/02	13.76		133.03	0.00				
	10/22/02	14.76		132.03	0.00				
	01/27/03	11.41		135.38	0.00				

Table 1. Water Level Data/Well Construction Details - Redwood Oil Bulk Plant, 455 Yolanda Ave. Santa Rosa, CA

Well ID	Sample Date	DTW (Ft)	TOC (Ft, msl)	GWE (Ft, msl)	Product (ft)	Screen Interval	Sand Pack Interval	Bentonite/ Grout Interval	Notes
MW-18	04/21/03	11.58	146.79	135.21	0.00	8 - 25	7 - 25	0 - 7	
	07/21/03	12.71		134.08	0.00				
	01/20/04	11.19		135.60	0.00				
	07/19/04	12.67		134.12	0.00				
	01/17/05	10.91		135.88	0.00				
	02/01/06	8.09		138.70	0.00				
MW-19	05/08/00	8.95	100.42	91.47	0.00	8 - 25	7 - 25	0 - 7	
	06/07/00	9.62		90.80	0.00				
	10/30/00	12.66		132.52	0.00				Top of casing elevation surveyed.
	02/01/01	12.65		132.53	0.00				
	04/23/01	10.55		134.63	0.00				
	07/23/01	12.27		132.91	0.00				
	10/23/01	13.92		131.26	0.00				
	01/21/02	9.44	147.83	138.39	0.00				Top of casing elevations were surveyed for EDF compliance.
	04/25/02	9.61		138.22	0.00				
	07/22/02	10.65		137.18	0.00				
	10/22/02	11.66		136.17	0.00				
	01/27/03	9.60		138.23	0.00				
	04/21/03	9.16		138.67	0.00				
	07/21/03	9.55		138.28	0.00				
	01/20/04	9.20		138.63	0.00				
	07/19/04	10.68		137.15	0.00				
	01/17/05	9.33		138.50	0.00				
	02/01/06	7.02		140.81	0.00				
MW-20	06/07/00	9.47	103.13	93.66	0.00	10-25	8-25	6-8	
	10/30/00	11.81		135.67	0.00				Top of casing elevation surveyed.
	2/15/0112	11.42		136.06	0.00				
	4/23/0113	---		---	---				
	07/23/01	12.37		135.11	0.00				
	10/23/01	13.45		134.03	0.00				

Table 1. Water Level Data/Well Construction Details - Redwood Oil Bulk Plant, 455 Yolanda Ave. Santa Rosa, CA

Well ID	Sample Date	DTW (Ft)	TOC (Ft, msl)	GWE (Ft, msl)	Product (ft)	Screen Interval	Sand Pack Interval	Bentonite/ Grout Interval	Notes
MW-20	01/21/02	9.68	150.13	140.45	0.00	10-25	8-25	6-8	Top of casing elevations were surveyed for EDF compliance.
	04/25/02	—		—	---				Well was inaccessible
	07/22/02	11.41		138.72	0.00				
	10/22/02	11.98		138.15	0.00				
	01/27/03	10.78		139.35	0.00				
	04/21/03	9.87		140.26	0.00				
	07/21/03	12.16		137.97	0.00				
	01/20/04	8.94		141.19	0.00				
	07/19/04	10.78		139.35	0.00				
	01/17/05	8.98		141.15	0.00				
	02/01/06	12.30		137.83	0.00				
V-1	06/13/91	21.89	102.53	80.64	0.00	15.5 - 25.5	13.5 - 25.5	0 - 13.5	
	07/09/91	21.91		80.62	0.00				
	08/01/91	21.34		81.19	0.00				
	08/29/91	21.10		81.43	0.00				
	09/11/91	21.25		81.28	0.00				
	10/08/91	22.88		79.65	0.00				
	11/08/91	22.15		80.38	0.00				
	12/11/91	---		---	---				
	01/13/92	21.28		81.25	0.00				
	02/11/92	18.75		83.78	0.00				
	03/11/92	13.54	102.53	88.99	0.00				
	04/13/92	14.52		88.01	0.00				
	05/15/92	15.18		87.35	0.00				
	06/15/92	16.29		86.24	0.00				
	07/16/92	17.22		85.31	0.00				
	08/18/92	17.08		85.45	0.00				
	09/18/92	18.25		84.28	0.00				
	12/08/92	17.80		84.73	0.00				
	03/10/93	15.59		86.94	0.00				
	06/04/93	14.97		87.56	0.00				
	10/14/93	14.66		87.87	0.00				

Table 1. Water Level Data/Well Construction Details - Redwood Oil Bulk Plant, 455 Yolanda Ave. Santa Rosa, CA

Well ID	Sample Date	DTW (Ft)	TOC (Ft, msl)	GWE (Ft, msl)	Product (ft)	Screen Interval	Sand Pack Interval	Bentonite/ Grout Interval	Notes
V-1	04/11/94	14.00	102.53	88.53	0.00	15.5 - 25.5	13.5 - 25.5	0 - 13.5	
	10/19/94	13.92		88.61	0.00				
	04/11/95	9.28		93.25	0.00				
	03/06/96	9.72		92.81	0.00				
	10/14/96	11.91		90.60	0.00				Top of casing elevations were surveyed.
	04/09/97	10.48		92.03	0.00				
	10/29/97	13.96		88.57	0.02				
	04/07/98	8.01		94.50	0.00				
	10/07/98	11.10		91.41	0.00				
	04/07/99	8.15		94.36	0.00				
	10/19/99	11.49	146.85	91.02	0.00				
	04/26/00	8.64		93.87	0.00				
	10/30/00	11.85		135.00	0.00				Top of casing elevations were surveyed.
	02/26/01	12.55		134.30	0.00				
	04/23/01	13.14		133.71	0.00				
	07/23/01	13.73		133.12	0.00				
	10/23/01	14.85		132.00	0.00				
	01/21/02	11.70	149.50	137.80	0.00				Top of casing elevations were surveyed for EDF compliance.
	04/25/02	11.65		137.85	0.00				
	07/22/02	12.52		136.98	0.00				
	10/22/02	12.90		136.60	0.00				
	01/27/03	11.43		138.07	0.00				
	04/21/03	11.44		138.06	0.00				
	07/21/03	12.08		137.42	0.00				
	01/20/04	10.54		138.96	0.00				
	07/19/04	11.92		137.58	0.00				
	01/17/05	10.21		139.29	0.00				
	07/12/05	9.96		139.54	0.00				
V-2	06/13/91	---	101.13	---	---	8 - 23	7 - 23	0 - 7	
	07/09/91	---		---	---				
	08/01/91	---		---	---				
	08/29/91	---		---	---				

Table 1. Water Level Data/Well Construction Details - Redwood Oil Bulk Plant, 455 Yolanda Ave. Santa Rosa, CA

Well ID	Sample Date	DTW (Ft)	TOC (Ft, msl)	GWE (Ft, msl)	Product (ft)	Screen Interval	Sand Pack Interval	Bentonite/Grout Interval	Notes
V-2	09/11/91	---	101.13	---	---	8 - 23	7 - 23	0 - 7	
	10/08/91	---		---	---				
	11/08/91	---		---	---				
	12/11/91	---		---	---				
	01/13/92	18.39		82.74	0.00				
	02/11/92	21.16		79.97	0.00				
	03/11/92	16.86		84.27	0.00				
	04/13/92	17.03		84.10	0.00				
	05/15/92	17.78		83.35	0.00				
	06/15/92	21.44		79.69	0.00				
	07/16/92	---		---	---				
	08/18/92	---		---	---				
	09/18/92	---		---	---				
	12/08/92	19.41		81.72	0.00				
	03/10/93	13.62		87.51	0.00				
	06/04/93	12.98		88.15	0.00				
	10/14/93	---		---	---				
	04/11/94	20.11		81.02	0.00				
	10/19/94	---		---	---				
	04/11/95	12.14		88.99	0.00				
	03/06/96	13.01		88.12	0.00				
	10/14/96	16.04	100.82	84.78	0.00				
	04/09/97	13.46		87.36	0.00				
	10/29/97	17.24		83.58	0.00				
	04/07/98	8.01		94.50	0.00				
	10/07/98	13.68		87.14	0.00				
	04/07/99	10.56		90.26	0.00				
	10/19/99	13.96		86.86	0.00				
	04/26/00	9.31		91.51	0.00				
	10/30/00	11.75	143.85	132.10	0.00				Top of casing elevations were surveyed.
	02/26/01	10.36		133.49	0.00				
	04/23/01	15.10		128.75	0.00				
	08/22/01	15.48		128.37	0.00				Well has been switched to a SVE (soil vapor extraction) well.

Table 1. Water Level Data/Well Construction Details - Redwood Oil Bulk Plant, 455 Yolanda Ave. Santa Rosa, CA

Well ID	Sample Date	DTW (Ft)	TOC (Ft, msl)	GWE (Ft, msl)	Product (ft)	Screen Interval	Sand Pack Interval	Bentonite/ Grout Interval	Notes
<hr/>									
DW-1	06/13/91	37.82	102.64	64.82	0.00	140 - 180	61 - 180	0 - 61	Well has been abandoned.
	07/09/91	37.82		64.82	0.00				
	08/01/91	92.26		10.38	0.00				
	08/29/91	50.13		52.51	0.00				
	09/11/91	39.72		62.92	0.00				
	10/08/91	39.31		63.33	0.00				
	11/09/91	38.90		63.74	0.00				
	12/11/91	39.96		62.68	0.00				
	12/08/92	37.75		64.89	0.00				
	03/10/93	32.60		70.04	0.00				
	06/04/93	32.35		70.29	0.00				
	10/14/93	---		---	---				
<hr/>									
DW-2	03/09/74	---	---	---	---	94 - 134	unknown	0 - 20	Well has been abandoned.
	10/17/95	---		---	---				
	10/21/96	---		---	---				
	04/10/97	---		---	---				
	10/30/97	---		---	---				
	04/08/98	---		---	---				
	10/07/98	---		---	---				
	04/07/99	---		---	---				
	08/30/99	23.23		---	0.48				

Table 1. Water Level Data/Well Construction Details - Redwood Oil Bulk Plant, 455 Yolanda Ave. Santa Rosa, CA

EXPLANATION:

DTW = Depth to water
ft =feet
msl = mean sea level
TOC = Top of casing elevation
GWE = Ground water elevation
— = **Not applicable**

Table 2. Water Level Data/Well Construction Details for Multi-Level Wells - Redwood Oil Bulk Plant,
455 Yolanda Ave. Santa Rosa, CA.

Well ID	Sample Depth (in feet)	Date Measured	DTW (ft)	TOC (ft)	GWE	Screen Interval
MW-21	24	2/26/01	15.0	146	131.0	23 - 24
	50	2/26/01	17.0		129.0	49 - 50
	75	2/26/01	17.0		129.0	74 - 75
	110	2/26/01	21.5		124.5	109 - 110
	143	2/26/01	21.5		124.5	142 - 143
	158	2/26/01	21.5		124.5	157 - 158
	165.5	2/26/01	21.5		124.5	164.5 - 165.5
	24	4/26/01	15.73	145.79 ¹	130.06	23 - 24
	50	4/26/01	12.40		133.39	49 - 50
	75	4/26/01	17.46		128.33	74 - 75
	110	4/26/01	20.84		124.95	109 - 110
	143	4/26/01	20.97		124.82	142 - 143
	158	4/26/01	20.98		124.81	157 - 158
	165.5	4/26/01	21.02		124.77	164.5 - 165.5
	24	7/25/01	19.64		126.15	23 - 24
	50	7/25/01	18.58		127.21	49 - 50
	75	7/25/01	19.45		126.34	74 - 75
	110	7/25/01	23.51		122.28	109 - 110
	143	7/25/01	23.67		122.28	142 - 143
	158	7/25/01	23.66		122.13	157 - 158
	165.5	7/25/01	23.89		121.90	164.5 - 165.5
	24	10/25/01	17.82	148.44 ⁴	127.97	23 - 24
	50	10/25/01	21.85		123.94	49 - 50
	75	10/25/01	21.95		123.84	74 - 75
	110	10/25/01	25.72		120.07	109 - 110
	143	10/25/01	25.88		119.91	142 - 143
	158	10/25/01	25.85		119.94	157 - 158
	165.5	10/25/01	25.88		119.91	164.5 - 165.5
	24	1/24/02	16.85		131.59	23 - 24
	75	1/24/02	16.20		132.24	74 - 75
	143	1/24/02	19.10		129.34	142 - 143
	165.5	1/24/02	19.20		129.24	164.5 - 165.5
	24	4/26/02	17.18		131.26	23 - 24
	75	4/26/02	16.17		132.27	74 - 75

Table 2. Water Level Data/Well Construction Details for Multi-Level Wells - Redwood Oil Bulk Plant,
455 Yolanda Ave. Santa Rosa, CA.

Well ID	Sample Depth (in feet)	Date Measured	DTW (ft)	TOC (ft)	GWE	Screen Interval
MW-21 cont	143	4/26/02	16.50	148.44	131.94	142 - 143
	165.5	4/26/02	18.55		129.89	164.5 - 165.5
	24	7/22/02	17.50		130.94	23 - 24
	75	7/22/02	17.75		130.69	74 - 75
	143	7/22/02	20.88		127.56	142 - 143
	165.5	7/22/02	20.95		127.49	164.5 - 165.5
	24	10/23/02	17.81		130.63	23 - 24
	75	10/23/02	18.92		129.52	74 - 75
	143	10/23/02	19.55		128.89	142 - 143
	165.5	10/23/02	22.65		125.79	164.5 - 165.5
	24	1/27/03	16.00		132.44	23 - 24
	75	1/27/03	15.10		133.34	74 - 75
	143	1/27/03	15.75		132.69	142 - 143
	165.5	1/27/03	15.78		132.66	164.5 - 165.5
	24	4/21/03	15.57		132.87	23 - 24
	75	4/21/03	14.89		133.55	74 - 75
	143	4/21/03	17.17		131.27	142 - 143
	165.5	4/21/03	17.19		131.25	164.5 - 165.5
	24	7/21/03	16.27		132.17	23 - 24
	75	7/21/03	16.16		132.28	74 - 75
	143	7/21/03	19.44		129.00	142 - 143
	165.5	7/21/03	19.52		128.92	164.5 - 165.5
	24	1/20/04	14.51		133.93	23 - 24
	75	1/20/04	14.74		133.70	74 - 75
	143	1/20/04	15.87		132.57	142 - 143
	165.5	1/20/04	15.77		132.67	164.5 - 165.5
	24	7/19/04	15.45		132.99	23 - 24
	75	7/19/04	15.76		132.68	74 - 75
	143	7/19/04	18.18		130.26	142 - 143
	165.5	7/19/04	18.26		130.18	164.5 - 165.5
	24	1/20/05	11.83		136.61	23 - 24
	75	1/20/05	13.12		135.32	74 - 75
	143	1/20/05	16.12		132.32	142 - 143
	165.5	1/20/05	15.96		132.48	164.5 - 165.5

Table 2. Water Level Data/Well Construction Details for Multi-Level Wells - Redwood Oil Bulk Plant,
455 Yolanda Ave. Santa Rosa, CA.

Well ID	Sample Depth (in feet)	Date Measured	DTW (ft)	TOC (ft)	GWE	Screen Interval
MW-21 cont.	24	7/12/05	11.86	148.44	136.58	23 - 24
	75	7/12/05	12.77		135.67	74 - 75
	143	7/12/05	14.65		133.79	142 - 143
	165.5	7/12/05	14.70		133.74	164.5 - 165.5
	24	2/1/06	10.28		138.16	23 - 24
	75	2/1/06	11.00		137.44	74 - 75
	143	2/1/06	12.79		135.65	142 - 143
	165.5	2/1/06	12.87		135.57	164.5 - 165.5
MW-22	22	2/26/01	17.0	145.50	128.5	21 - 22
	47	2/26/01	21.0		124.5	46 - 47
	72.5	2/26/01	21.5		124.0	71.5 - 72.5
	113	2/26/01	21.5		124.0	112 - 113
	144	2/26/01	21.5		124.0	143 - 144
	164.5	2/26/01	21.5		124.0	163.5 - 164.5
	177.5	2/26/01	43.0		102.5	176.5 - 177.5
	22	4/27/01	20.30	145.45 ¹	125.15	21 - 22
	47	4/27/01	20.69		124.76	46 - 47
	72.5	4/27/01	20.39		125.06	71.5 - 72.5
	113	4/27/01	17.88		127.57	112 - 113
	144	4/27/01	20.75		124.70	143 - 144
	164.5	4/27/01	20.79		124.66	163.5 - 164.5
	177.5	4/27/01	10.55		134.90	176.5 - 177.5
	22	7/25/01	20.61		124.84	21 - 22
	47	7/25/01	19.95		125.50	46 - 47
	72.5	7/25/01	23.22		122.23	71.5 - 72.5
	113	7/25/01	23.32		122.13	112 - 113
	144	7/25/01	23.35		122.10	143 - 144
	164.5	7/25/01	23.40		122.05	163.5 - 164.5
	177.5	7/25/01 ²	—		---	176.5 - 177.5
MW-22	22	10/25/01 ³	—		---	21 - 22
	47	10/25/01	24.97		120.48	46 - 47
	72.5	10/25/01	25.40		120.05	71.5 - 72.5
	113	10/25/01	25.46		119.99	112 - 113

Table 2. Water Level Data/Well Construction Details for Multi-Level Wells - Redwood Oil Bulk Plant,
455 Yolanda Ave. Santa Rosa, CA.

Well ID	Sample Depth (in feet)	Date Measured	DTW (ft)	TOC (ft)	GWE	Screen Interval
MW-22 cont	144	10/25/01	25.50	145.45 ¹	119.95	143 - 144
	164.5	10/25/01	25.60		119.85	163.5 - 164.5
	177.5	10/25/01 ²	—		---	176.5 - 177.5
	22	1/24/02	18.70		129.40	21 - 22
	72.5	1/24/02	18.75		129.35	71.5 - 72.5
	144	1/24/02	18.82		129.28	143 - 144
	177.5	1/24/02	18.85		129.25	163.5 - 164.5
	22	4/26/02	18.61		129.49	21 - 22
	72.5	4/26/02	18.10		130.00	71.5 - 72.5
	144	4/26/02	18.12		129.98	143 - 144
	164.5	4/26/02	18.14		129.96	163.5 - 164.5
	22	7/22/02	19.35		128.75	21 - 22
	72.5	7/22/02	20.25		127.85	71.5 - 72.5
	144	7/22/02	20.57		127.53	143 - 144
	164.5	7/22/02	20.57		127.53	163.5 - 164.5
	22	10/23/02	dry		---	21 - 22
	72.5	10/23/02	22.25		125.85	71.5 - 72.5
	144	10/23/02	22.27		125.83	143 - 144
	164.5	10/23/02	22.30		125.80	163.5 - 164.5
	22	1/27/03	13.80		134.30	21 - 22
	72.5	1/27/03	17.42		130.68	71.5 - 72.5
	144	1/27/03	17.52		130.58	143 - 144
	164.5	1/27/03	17.53		130.57	163.5 - 164.5
	22	4/21/03	14.21		133.89	21 - 22
	72.5	4/21/03	16.88		131.22	71.5 - 72.5
	144	4/21/03	16.90		131.20	143 - 144
	164.5	4/21/03	16.90		131.20	163.5 - 164.5
	22	7/21/03	15.18		132.92	21 - 22
	72.5	7/21/03	19.00		129.10	71.5 - 72.5
	144	7/21/03	19.13		128.97	143 - 144
	164.5	7/21/03	19.13		128.97	163.5 - 164.5
	22	1/20/04	13.48		134.62	21 - 22
	72.5	1/20/04	17.41		130.69	71.5 - 72.5
	144	1/20/04	17.48		130.62	143 - 144

Table 2. Water Level Data/Well Construction Details for Multi-Level Wells - Redwood Oil Bulk Plant,
455 Yolanda Ave. Santa Rosa, CA.

Well ID	Sample Depth (in feet)	Date Measured	DTW (ft)	TOC (ft)	GWE	Screen Interval
MW-22 cont.	164.5	1/20/04	17.48	148.10	130.62	163.5 - 164.5
	22	7/19/04	18.38		129.72	21 - 22
	72.5	7/19/04	17.69		130.41	71.5 - 72.5
	144	7/19/04	17.83		130.27	143 - 144
	164.5	7/19/04	17.82		130.28	163.5 - 164.5
	22	1/20/05	11.73		136.37	21 - 22
	72.5	1/20/05	15.44		132.66	71.5 - 72.5
	144	1/20/05	15.60		132.50	143 - 144
	164.5	1/20/05	15.61		132.49	163.5 - 164.5
	22	7/12/05	16.40		131.70	21 - 22
	72.5	7/12/05	14.28		133.82	71.5 - 72.5
	144	7/12/05	14.37		133.73	143 - 144
	164.5	7/12/05	14.38		133.72	163.5 - 164.5
	22	2/1/06	11.03		137.07	21 - 22
	72.5	2/1/06	12.32		135.78	71.5 - 72.5
	144	2/1/06	12.46		135.64	143 - 144
	164.5	2/1/06	12.46		135.64	163.5 - 164.5
MW-23	25	2/26/01	22.5	146.50	124.0	24 - 25
	50	2/26/01	23.0		123.5	49 - 50
	75	2/26/01	23.0		123.5	74 - 75
	120.5	2/26/01	23.5		123.0	119.5 - 120.5
	148.5	2/26/01	23.5		123.0	147.5 - 148.5
	163.5	2/26/01	23.0		123.5	162.5 - 163.5
	180	2/26/01	23.5		123.0	179 - 18
	25	4/30/01	21.70	146.53 ¹	124.83	24 - 25
	50	4/30/01	21.76		124.77	49 - 50
	75	4/30/01	21.80		124.73	74 - 75
	120.5	4/30/01	22.86		123.67	119.5 - 120.5
	148.5	4/30/01	22.41		124.12	147.5 - 148.5
	163.5	4/30/01	20.09		126.44	162.5 - 163.5
	180	4/30/01	22.29		124.24	179 - 180
	25	7/25/01	24.77		121.76	24 - 25
	50	7/25/01	24.46		122.07	49 - 50

Table 2. Water Level Data/Well Construction Details for Multi-Level Wells - Redwood Oil Bulk Plant,
455 Yolanda Ave. Santa Rosa, CA.

Well ID	Sample Depth (in feet)	Date Measured	DTW (ft)	TOC (ft)	GWE	Screen Interval
MW-23 cont	75	7/25/01	24.47	146.53 ¹	122.06	74 - 75
	120.5	7/25/01	24.65		121.88	119.5 - 120.5
	148.5	7/25/01	24.75		121.78	147.5 - 148.5
	163.5	7/25/01	24.90		121.63	162.5 - 163.5
	180	7/25/01	24.94		121.59	179 - 180
	25	10/25/01	24.75		121.78	24 - 25
	50	10/25/01	26.57		119.96	49 - 50
	75	10/25/01	26.57		119.96	74 - 75
	120.5	10/25/01	26.68		119.85	119.5 - 120.5
	148.5	10/25/01	26.54		119.99	147.5 - 148.5
	163.5	10/25/01	26.96		119.57	162.5 - 163.5
	180	10/25/01	26.98		119.55	179 - 180
25	25	1/24/02	20.13	149.18 ⁴	129.05	24 - 25
	75	1/24/02	20.00		129.18	74 - 75
	148.5	1/24/02	20.60		128.58	147.5 - 148.5
	180	1/24/02	20.35		128.83	179 - 180
	25	4/26/02	19.10		130.08	24 - 25
	75	4/26/02	19.15		130.03	74 - 75
	148.5	4/26/02	19.27	149.18	129.91	147.5 - 148.5
	180	4/26/02	19.40		129.78	179 - 180
	25	7/22/02	21.27		127.91	24 - 25
	75	7/22/02	21.56		127.62	74 - 75
	148.5	7/22/02	20.65		128.53	147.5 - 148.5
	180	7/22/02	21.85		127.33	179 - 180
25	25	10/23/02	dry		---	24 - 25
	75	10/23/02	23.28		125.90	74 - 75
	148.5	10/23/02	22.50		126.68	147.5 - 148.5
	180	10/23/02	23.62		125.56	179 - 180
	25	1/27/03	18.43		130.75	24 - 25
	75	1/27/03	18.55		130.63	74 - 75
	148.5	1/27/03	19.04		130.14	147.5 - 148.5
	180	1/27/03	18.85		130.33	179 - 180
	25	4/21/03	18.05	149.18	131.13	24 - 25
	75	4/21/03	18.02		131.16	74 - 75

Table 2. Water Level Data/Well Construction Details for Multi-Level Wells - Redwood Oil Bulk Plant,
455 Yolanda Ave. Santa Rosa, CA.

Well ID	Sample Depth (in feet)	Date Measured	DTW (ft)	TOC (ft)	GWE	Screen Interval
MW-23 cont	148.5	4/21/03	18.30	149.18	130.88	147.5 - 148.5
	180	4/21/03	18.18		131.00	179 - 180
	25	7/21/03	19.74		129.44	24 - 25
	75	7/21/03	20.02		129.16	74 - 75
	148.5	7/21/03	19.00		130.18	147.5 - 148.5
	180	7/21/03	20.40		128.78	179 - 180
	25	1/20/04	18.61		130.57	24 - 25
	75	1/20/04	18.69		130.49	74 - 75
	148.5	1/20/04	18.83		130.35	147.5 - 148.5
	180	1/20/04	18.89		130.29	179 - 180
	25	7/19/04	18.34		130.84	24 - 25
	75	7/19/04	18.60		130.58	74 - 75
	148.5	7/19/04	18.74		130.44	147.5 - 148.5
	180	7/19/04	19.07		130.11	179 - 180
	25	1/20/05	16.45		132.73	24 - 25
	75	1/20/05	16.61		132.57	74 - 75
	148.5	1/20/05	17.05		132.13	147.5 - 148.5
	180	1/20/05	17.03		132.15	179 - 180
	25	7/12/05	15.09		134.09	24 - 25
	75	7/12/05	15.17		134.01	74 - 75
	148.5	7/12/05	15.52		133.66	147.5 - 148.5
	180	7/12/05	15.59		133.59	179 - 180
	25	2/1/06	13.30		135.88	24 - 25
	75	2/1/06	13.39		135.79	74 - 75
	148.5	2/1/06	13.75		135.43	147.5 - 148.5
	180	2/1/06	13.77		135.41	179 - 180
MW-24	23	2/26/01	19.0	147.00	128.0	22 - 23
	48	2/26/01	22.5		124.5	47 - 48
	73	2/26/01	22.5		124.5	72 - 73
	113	2/26/01	23.0		124.0	112 - 113
	146	2/26/01	23.5		123.5	145 - 146
	161	2/26/01	23.5		123.5	160 - 161
	178	2/26/01	23.5		123.5	177 - 178

Table 2. Water Level Data/Well Construction Details for Multi-Level Wells - Redwood Oil Bulk Plant,
455 Yolanda Ave. Santa Rosa, CA.

Well ID	Sample Depth (in feet)	Date Measured	DTW (ft)	TOC (ft)	GWE	Screen Interval
MW-24 cont'd	23	5/1/01	16.40	147.14 ¹	130.74	22 - 23
	48	5/1/01	21.43		125.71	47 - 48
	73	5/1/01	21.51		125.63	72 - 73
	113	5/1/01	21.85		125.29	112 - 113
	146	5/1/01	22.21		124.93	145 - 146
	161	5/1/01	22.43		124.71	160 - 161
	178	5/1/01	22.39		124.75	177 - 178
	23	7/25/01	20.22		126.92	22 - 23
	48	7/25/01	24.10		123.04	47 - 48
	73	7/25/01	24.15		122.99	72 - 73
	113	7/25/01	24.59		122.55	112 - 113
	146	7/25/01	25.02		122.12	145 - 146
	161	7/25/01	25.25		121.89	160 - 161
	178	7/25/01	25.26		121.88	177-178
	23	10/25/01 ³	—		---	22 - 23
	48	10/25/01	22.77		124.37	47 - 48
	73	10/25/01	26.78		120.36	72 - 73
	113	10/25/01	26.90		120.24	112 - 113
	146	10/25/01	27.35		119.79	145 - 146
	161	10/25/01	27.45		119.69	160 - 161
	178	10/25/01	27.44		119.70	177-178
23	1/25/02	22.10	149.79 ⁴	127.69	22 - 23	
	73	1/25/02		129.59	72 - 73	
	146	1/25/02		129.49	145 - 146	
	178	1/25/02		129.64	177 - 178	
	23	4/26/02		132.07	22 - 23	
	73	4/26/02		130.67	72 - 73	
	146	4/26/02		129.96	145 - 146	
	178	4/26/02		129.89	177 - 178	
	23	7/22/02		130.13	22 - 23	
	73	7/22/02		128.24	72 - 73	
	146	7/22/02		127.53	145 - 146	
	178	7/22/02		127.44	177 - 178	
23	10/23/02	21.22		128.57	22 - 23	

Table 2. Water Level Data/Well Construction Details for Multi-Level Wells - Redwood Oil Bulk Plant,
455 Yolanda Ave. Santa Rosa, CA.

Well ID	Sample Depth (in feet)	Date Measured	DTW (ft)	TOC (ft)	GWE	Screen Interval
MW-24 cont'd	73	10/23/02	23.35	149.79 ⁴	126.44	72 - 73
	146	10/23/02	24.20		125.59	145 - 146
	178	10/23/02	24.20		125.59	177 - 178
	23	1/27/03	17.56		132.23	22 - 23
	73	1/27/03	18.04		131.75	72 - 73
	146	1/27/03	19.24		130.55	145 - 146
	178	1/27/03	19.02		130.77	177 - 178
	23	4/21/03	16.38		133.41	22 - 23
	73	4/21/03	17.67		132.12	72 - 73
	146	4/21/03	18.35		131.44	145 - 146
	178	4/21/03	18.44		131.35	177 - 178
	23	2/1/06	14.74		135.05	22 - 23
	73	2/1/06	13.92		135.87	72 - 73
	146	2/1/06	14.95		134.84	145 - 146
	178	2/1/06	14.45		135.34	177 - 178
MW-25	25	1/28/02	17.92	149.92 ⁴	132.00	24.5 - 25.5
	75	1/28/02	20.72		129.20	74.5 - 75.5
	145	1/28/02	20.85		129.07	144.5 - 145.5
	180	1/28/02	20.82		129.10	179.5 - 180.5
	230	1/28/02	20.95		128.97	229.5 - 230.5
	25	4/26/02	17.16		132.76	24.5 - 25.5
	75	4/26/02	20.04		129.88	74.5 - 75.5
	145	4/26/02	20.30		129.62	144.5 - 145.5
	180	4/26/02	20.00		129.92	179.5 - 180.5
	230	4/26/02	20.20		129.72	229.5 - 230.5
	25	7/22/02	18.20		131.72	24.5 - 25.5
	75	7/22/02	22.41		127.51	74.5 - 75.5
	145	7/22/02	22.47		127.45	144.5 - 145.5
	180	7/22/02	22.50		127.42	179.5 - 180.5
	230	7/22/02	22.61		127.31	229.5 - 230.5
	25	1/27/03	16.93		132.99	24.5 - 25.5
	75	1/27/03	19.62		130.30	74.5 - 75.5

Table 2. Water Level Data/Well Construction Details for Multi-Level Wells - Redwood Oil Bulk Plant,
455 Yolanda Ave. Santa Rosa, CA.

Well ID	Sample Depth (in feet)	Date Measured	DTW (ft)	TOC (ft)	GWE	Screen Interval
MW-25 cont'd	145	1/27/03	19.75	149.92	130.17	144.5 - 145.5
	180	1/27/03	19.62		130.30	179.5 - 180.5
	230	1/27/03	19.77		130.15	229.5 - 230.5
	25	4/21/03	15.89		134.03	24.5 - 25.5
	75	4/21/03	18.89		131.03	74.5 - 75.5
	145	4/21/03	19.03		130.89	144.5 - 145.5
	180	4/21/03	18.77		131.15	179.5 - 180.5
	230	4/21/03	18.89		131.03	229.5 - 230.5
	25	2/1/06	12.23		137.69	24.5 - 25.5
	75	2/1/06	14.19		135.73	74.5 - 75.5
	145	2/1/06	14.29		135.63	144.5 - 145.5
	180	2/1/06	14.23		135.69	179.5 - 180.5
	230	2/1/06	14.45		135.47	229.5 - 230.5
MW-26	25	1/25/02	20.02	148.23 ⁴	128.21	24.5 - 25.5
	75	1/25/02	19.42		128.81	74.5 - 75.5
	145	1/25/02	25.30		122.93	144.5-145.5
	180	1/25/02	25.31		122.92	179.5 - 180.5
	25	4/26/02	19.10		129.13	24.5 - 25.5
	75	4/26/02	18.56		129.67	74.5 - 75.5
	145	4/26/02	24.11		124.12	144.5-145.5
	180	4/26/02	24.00		124.23	179.5 - 180.5
	25	7/22/02	20.58		127.65	24.5 - 25.5
	75	7/22/02	20.90		127.33	74.5 - 75.5
	145	7/22/02	26.87		121.36	144.5-145.5
	180	7/22/02	26.75		121.48	179.5 - 180.5
	25	1/27/03	19.10		129.13	24.5 - 25.5
	75	1/27/03	18.11		130.12	74.5 - 75.5
	145	1/27/03	24.22		124.01	144.5-145.5
	180	1/27/03	24.74		123.49	179.5 - 180.5
	25	4/21/03	18.18		130.05	24.5 - 25.5
	75	4/21/03	17.36		130.87	74.5 - 75.5
	145	4/21/03	23.12		125.11	144.5-145.5
	180	4/21/03	23.50		124.73	179.5 - 180.5

Table 2. Water Level Data/Well Construction Details for Multi-Level Wells - Redwood Oil Bulk Plant,
455 Yolanda Ave. Santa Rosa, CA.

Well ID	Sample Depth (in feet)	Date Measured	DTW (ft)	TOC (ft)	GWE	Screen Interval
MW-26 cont'd	25	1/20/04	18.89	148.23	129.34	24.5 - 25.5
	75	1/20/04	18.19		130.04	74.5 - 75.5
	145	1/20/04	---		---	144.5-145.5
	180	1/20/04	---		---	179.5 - 180.5
	25	7/19/04	18.02		130.21	24.5 - 25.5
	75	7/19/04	18.19		130.04	74.5 - 75.5
	145	7/19/04	20.09		128.14	144.5-145.5
	180	7/19/04	20.16		128.07	179.5 - 180.5
	25	1/19/05	17.17		131.06	24.5 - 25.5
	75	1/19/05	16.46		131.77	74.5 - 75.5
	25	2/1/06	18.11		130.12	24.5 - 25.5
	75	2/1/06	18.35		129.88	74.5 - 75.5
	145	2/1/06	20.70		127.53	144.5-145.5
	180	2/1/06	20.69		127.54	179.5 - 180.5
MW-27	25	1/28/02	10.95	147.65 ^a	136.70	24.5 - 25.5
	75	1/28/02	12.50		135.15	74.5 - 75.5
	145	1/28/02	14.80		132.85	144.5 - 145.5
	180	1/28/02	14.80		132.85	179.5 - 180.5
	230	1/28/02	19.82		127.83	229.5-230.5
	25	4/26/02	10.32		137.33	24.5 - 25.5
	75	4/26/02	11.45		136.20	74.5 - 75.5
	145	4/26/02	15.32		132.33	144.5 - 145.5
	180	4/26/02	16.31		131.34	179.5 - 180.5
	230	4/26/0228	18.52		129.13	229.5-230.5
	25	7/22/02	11.04		136.61	24.5 - 25.5
	75	7/22/02	13.28		134.37	74.5 - 75.5
	145	7/22/02	17.38		130.27	144.5 - 145.5
	180	7/22/02	17.40		130.25	179.5 - 180.5
	230	7/22/02	21.10		126.55	229.5-230.5
	25	10/23/02	12.32		135.33	24.5 - 25.5
	75	10/23/02	14.45		133.20	74.5 - 75.5
	145	10/23/02	18.86		128.79	144.5 - 145.5
	180	10/23/02	18.87		128.78	179.5 - 180.5

Table 2. Water Level Data/Well Construction Details for Multi-Level Wells - Redwood Oil Bulk Plant,
455 Yolanda Ave. Santa Rosa, CA.

Well ID	Sample Depth (in feet)	Date Measured	DTW (ft)	TOC (ft)	GWE	Screen Interval
MW-27 cont	230	10/23/02	23.25	147.65 ⁴	124.40	229.5-230.5
	25	1/27/03	9.14		138.51	24.5 - 25.5
	75	1/27/03	10.89		136.76	74.5 - 75.5
	145	1/27/03	13.89		133.76	144.5 - 145.5
	180	1/27/03	14.01		133.64	179.5 - 180.5
	230	1/27/03	18.07		129.58	229.5-230.5
	25	4/21/03	—		---	24.5 - 25.5
	75	4/21/03	---		---	74.5 - 75.5
	145	4/21/03	---		---	144.5 - 145.5
	180	4/21/03	---		---	179.5 - 180.5
	230	4/21/03	---		---	229.5-230.5
	25	2/1/06	7.47		140.18	24.5 - 25.5
	75	2/1/06	8.90		138.75	74.5 - 75.5
	145	2/1/06	10.44		137.21	144.5 - 145.5
	180	2/1/06	10.44		137.21	179.5 - 180.5
	230	2/1/06	14.11		133.54	229.5-230.5
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MW-28	25	1/25/02	21.90	150.23 ⁴	128.33	24.5 - 25.5
	75	1/25/02	21.70		128.53	74.5 - 75.5
	145	1/25/02	21.60		128.63	144.5-145.5
	180	1/25/02	21.50		128.73	179.5-180.5
	25	4/26/02	20.40		129.83	24.5 - 25.5
	75	4/26/02	20.52		129.71	74.5 - 75.5
	145	4/26/02	20.60		129.63	144.5-145.5
	180	4/26/02	20.51		129.72	179.5-180.5
	25	7/22/02	DRY		---	24.5 - 25.5
	75	7/22/02	22.73		127.50	74.5 - 75.5
	145	7/22/02	22.83		127.40	144.5-145.5
	180	7/22/02	22.86		127.37	179.5-180.5
	25	1/27/03	20.36		129.87	24.5 - 25.5
	75	1/27/03	20.12		130.11	74.5 - 75.5
	145	1/27/03	20.10		130.13	144.5-145.5
	180	1/27/03	20.08		130.15	179.5-180.5
	25	4/21/03	19.53		130.70	24.5 - 25.5

Table 2. Water Level Data/Well Construction Details for Multi-Level Wells - Redwood Oil Bulk Plant,
455 Yolanda Ave. Santa Rosa, CA.

Well ID	Sample Depth (in feet)	Date Measured	DTW (ft)	TOC (ft)	GWE	Screen Interval
MW-28 cont	75	4/21/03	19.50	150.23	130.73	74.5 - 75.5
	145	4/21/03	19.57		130.66	144.5-145.5
	180	4/21/03	19.31		130.92	179.5-180.5
	25	7/21/03	21.09		129.14	24.5 - 25.5
	75	7/21/03	21.39		128.84	74.5 - 75.5
	145	7/21/03	21.49		128.74	144.5-145.5
	180	7/21/03	21.49		128.74	179.5-180.5
	25	1/20/04	20.35		129.88	24.5 - 25.5
	75	1/20/04	20.30		129.93	74.5 - 75.5
	145	1/20/04	---		---	144.5-145.5
	180	1/20/04	---		---	179.5-180.5
	25	7/19/04	20.09		130.14	24.5 - 25.5
	75	7/19/04	20.16		130.07	74.5 - 75.5
	145	7/19/04	---		---	144.5-145.5
	180	7/19/04	---		---	179.5-180.5
	25	1/19/05	19.00		131.23	24.5 - 25.5
	75	1/19/05	18.65		131.58	74.5 - 75.5
	25	2/1/06	15.05		135.18	24.5 - 25.5
	75	2/1/06	15.04		135.19	74.5 - 75.5
	145	2/1/06	15.00		135.23	144.5-145.5
	180	2/1/06	14.92		135.31	179.5-180.5
MW-29	25	1/25/02	15.92	148.60 ^a	132.68	24.5 - 25.5
	75	1/25/02	18.92		129.68	74.5 - 75.5
	145	1/25/02	26.21		122.39	144.5 - 145.5
	180	1/25/02	26.21		122.39	179.5 - 180.5
	25	4/26/02	17.34		131.26	24.5 - 25.5
	75	4/26/02	19.48		129.12	74.5 - 75.5
	145	4/26/02	25.02		123.58	144.5 - 145.5
	180	4/26/02	25.03		123.57	179.5 - 180.5
	25	7/22/02	19.22		129.38	24.5 - 25.5
	75	7/22/02	21.82		126.78	74.5 - 75.5
	145	7/22/02	27.82		120.78	144.5 - 145.5
	180	7/22/02	27.80		120.70	179.5 - 180.5

Table 2. Water Level Data/Well Construction Details for Multi-Level Wells - Redwood Oil Bulk Plant,
455 Yolanda Ave. Santa Rosa, CA.

Well ID	Sample Depth (in feet)	Date Measured	DTW (ft)	TOC (ft)	GWE	Screen Interval
MW-29 cont.	25	1/27/03	14.95	148.60	133.65	24.5 - 25.5
	75	1/27/03	17.44		131.16	74.5 - 75.5
	145	1/27/03	25.14		123.46	144.5 - 145.5
	180	1/27/03	25.15		123.45	179.5 - 180.5
	25	4/21/03	15.36		133.24	24.5 - 25.5
	75	4/21/03	17.09		131.51	74.5 - 75.5
	145	4/21/03	24.00		124.60	144.5 - 145.5
	180	4/21/03	24.00		124.60	179.5 - 180.5
	25	1/20/04	15.25		133.35	24.5 - 25.5
	75	1/20/04	17.77		130.83	74.5 - 75.5
	145	1/20/04	---		---	144.5 - 145.5
	180	1/20/04	---		---	179.5 - 180.5
	25	7/19/04	17.80		130.80	24.5 - 25.5
	75	7/19/04	19.16		129.44	74.5 - 75.5
	145	7/19/04	---		---	144.5 - 145.5
	180	7/19/04	---		---	179.5 - 180.5
	25	1/19/05	14.71		133.89	24.5 - 25.5
	75	1/09/05	16.89		131.71	74.5 - 75.5
	25	2/1/06	12.76		135.84	24.5 - 25.5
	75	2/1/06	13.55		135.05	74.5 - 75.5
	145	2/1/06	20.52		128.08	144.5 - 145.5
	180	2/1/06	20.51		128.09	179.5 - 180.5
MW-30	25	1/28/02	18.85	149.63 ^a	130.78	24.5 - 25.5
	75	1/28/02	20.00		129.63	74.5 - 75.5
	145	1/28/02	20.15		129.48	144.5 - 145.5
	180	1/28/02	20.00		129.63	179.5 - 180.5
	230	1/28/02	20.20		129.43	229.5 - 230.5
	25	4/26/02	18.75		130.88	24.5 - 25.5
	75	4/26/02	19.52		130.11	74.5 - 75.5
	145	4/26/02	19.65		129.98	144.5 - 145.5
	180	4/26/02	19.73		129.90	179.5 - 180.5
	230	4/26/02	19.75		129.88	229.5 - 230.5
	25	7/22/02	20.87		128.76	24.5 - 25.5

Table 2. Water Level Data/Well Construction Details for Multi-Level Wells - Redwood Oil Bulk Plant,
455 Yolanda Ave. Santa Rosa, CA.

Well ID	Sample Depth (in feet)	Date Measured	DTW (ft)	TOC (ft)	GWE	Screen Interval
MW-30 cont	75	7/22/02	21.90	149.63	127.73	74.5 - 75.5
	145	7/22/02	22.00		127.63	144.5 - 145.5
	180	7/22/02	22.16		127.47	179.5 - 180.5
	230	7/22/02	22.20		127.43	229.5 - 230.5
	25	1/27/03	17.53		132.10	24.5 - 25.5
	75	1/27/03	18.75		130.88	74.5 - 75.5
	145	1/27/03	18.97		130.66	144.5 - 145.5
	180	1/27/03	19.00		130.63	179.5 - 180.5
	230	1/27/03	19.07		130.56	229.5 - 230.5
	25	4/21/03	17.23		132.40	24.5 - 25.5
	75	4/21/03	18.17		131.46	74.5 - 75.5
	145	4/21/03	18.34		131.29	144.5 - 145.5
	180	4/21/03	18.43		131.20	179.5 - 180.5
	230	4/21/03	18.45		131.18	229.5 - 230.5
	25	7/21/03 ³	---		---	24.5 - 25.5
	75	7/21/03	20.42		129.21	74.5 - 75.5
	145	7/21/03	20.67		128.96	144.5 - 145.5
	180	7/21/03	20.82		128.81	179.5 - 180.5
	230	7/21/03	20.85		128.78	229.5 - 230.5
	25	1/20/04	17.44		132.19	24.5 - 25.5
	75	1/20/04	18.79		130.84	74.5 - 75.5
	145	1/20/04	---		---	144.5 - 145.5
	180	1/20/04	---		---	179.5 - 180.5
	230	1/20/04	---		---	229.5 - 230.5
	25	7/19/04	18.18		131.45	24.5 - 25.5
	75	7/19/04	19.25		130.38	74.5 - 75.5
	145	7/19/04	---		---	144.5 - 145.5
	180	7/19/04	---		---	179.5 - 180.5
	230	1/20/04	---		---	229.5 - 230.5
	25	1/19/05	15.99		133.64	24.5 - 25.5
	75	1/19/05	17.13		132.50	74.5 - 75.5
	25	2/1/06	13.01		136.62	24.5 - 25.5
	75	2/1/06	13.93		135.70	74.5 - 75.5
	145	2/1/06	14.21		135.42	144.5 - 145.5

Table 2. Water Level Data/Well Construction Details for Multi-Level Wells - Redwood Oil Bulk Plant,
455 Yolanda Ave. Santa Rosa, CA.

Well ID	Sample Depth (in feet)	Date Measured	DTW (ft)	TOC (ft)	GWE	Screen Interval
MW-30 cont	180	2/1/06	14.31	149.63	135.32	179.5 - 180.5
	230	2/1/06	14.40		135.23	229.5 - 230.5

Explanation:

DTW = depth to water

TOC = top of casing elevation

GWE = ground water elevation

Notes:

¹ Top of casing elevation was surveyed by professional land surveyor Barry L. Kolstad, PLS # 5677, on March 19, 2001.

² Unable to insert water level meter past 29.0 feet.

³ Port was dry.

⁴ Top of casing elevations were measured by Barry L Kolstad, using NAD 83 and NAVD 88 datum points for EDF compliance, on December 21, 2001.

Table 3. Analytic Results for Ground Water - Organic Compounds - Redwood Oil Bulk Plant, 455 Yolanda, Santa Rosa

Sample ID	Date Sampled	TPPH (G)	TPH (D)	TPH (MO)	TPH (K)	Benzene	Toluene	Ethyl benzene	Xylenes	Notes
		<----- ppb ----->								
MW-1	3/14/1991	----	---	--	--	--	--	--	--	Well was dry.
	6/13/1991	1,300	1,500	4,300	--	160	250	22	130	
	9/11/1991	250	1,300	1,800	--	1	<0.5	<0.5	<0.5	
	12/11/1991	--	--	--	--	--	--	--	--	Well was dry.
	3/11/1992	1,200	3,800	--	--	37	35	25	94	
	6/15/1992	1,900	4,500	--	--	920	1.3	13	3.4	
	9/18/1992	<50	<50	--	--	<0.5	<0.5	<0.5	<0.5	
	12/8/1992	350	2,700	--	--	5.4	<0.5	0.7	<0.5	
	3/10/1993	1,000	4,100	--	--	440	4.5	7.7	14	
	6/4/1993	<50	220	--	--	<0.5	<0.5	<0.5	<0.5	
	10/13/1993	280	--	--	--	12	3.2	1.3	6.5	
	4/11/1994	540	--	--	--	1.7	<0.5	0.5	<0.5	
	10/20/1994	170	--	--	--	2.2	2.7	<0.5	<0.5	
	4/11/1995	260	--	--	--	1	0.7	<0.5	1.1	
	3/6/1996	<250	<50	1,400	<500	7.7	<2.5	<2.5	<2.5	
	10/18/1996	<1,000	1,200	1,300	<50	<10	<10	<10	<10	
	4/9/1997	81	880	870	<50	12	1.4	<0.5	1.2	
	10/29/1997	92	880	1000	<50	4.4	<0.5	<0.5	0.5	
	4/7/1998	10,000	280	<50	<50	51	<0.5	<0.5	100	
	10/7/1998	200	<50	<50	<50	<0.5	<0.5	<0.5	1.5	
	4/7/1999	130	110	<100	<50	<0.5	0.76	0.56	4.2	
	10/19/1999	<5,000	<50	--	<50	<50	<50	<50	<50	
	4/26/2000	---	---	--	--	--	--	--	--	Well inaccessible.
	10/31/2000	120	<50	<50	--	3.8	0.99	2.7	4.7	
	2/2/2001	580	200	<250	--	10	5.3	3.8	29	
	4/23/2001	370	520	600	--	<0.5	0.5	<0.5	<0.5	
	7/23/2001	450	420	—	—	10	11	6.3	33	
	10/23/2001	410	510	550	—	15	1.5	5.7	23	
	1/22/2002	300	330	--	--	66	27	19	84	Sample was flagged. See laboratory analytical report for comments.
	4/25/2002	350	260	<250	--	75	37	18	64	
	7/23/2002	480	100	—	—	100	37	19	63	
	1/29/2003	<50	100	<250	--	<1	<1	<1	<1	
	7/22/2003	180	69	<250	--	50	8	11	26	
	1/20/2004	<50	79	<250	--	4	4	3	6	

Table 3. Analytic Results for Ground Water - Organic Compounds - Redwood Oil Bulk Plant, 455 Yolanda, Santa Rosa

Sample ID	Date Sampled	TPPH (G)	TPH (D)	TPH (MO)	TPH (K)	Benzene	Toluene	Ethyl benzene	Xylenes	Notes
		<----- ppb ----->								
MW-1 cont.	1/18/2005	150	<50	<250	---	26	5.6	15	21.8	
	1/24/2006	<100	<50	<250	---	8.6	5.4	2.0	9.8	
MW-2	3/14/1991	98,000	1,800	<500	--	19,000	19,000	2,000	11,000	
	6/13/1991	94,000	15,000	<5,000	--	20,000	24,000	2,400	15,000	
	9/11/1991	69,000	24,000	<500	--	22,000	29,000	2,000	15,000	
	12/11/1991	96,000	23,000	--	--	19,000	29,000	3,600	23,000	
	3/11/1992	320,000	82,000	--	--	11,000	30,000	3,600	29,000	
	6/15/1992	160,000	160,000	--	--	17,000	31,000	3,200	28,000	
	9/18/1992	210,000	52,000	--	--	16,000	40,000	3,300	23,000	
	12/8/1992	720,000	27,000	--	--	14,000	27,000	9,600	37,000	
	3/10/1993	100,000	31,000	--	--	6,400	25,000	2,800	24,000	
	6/4/1993	130,000	14,000	--	--	2,500	12,000	3,100	20,000	
	10/13/1993	120,000	--	--	--	10,000	26,000	2,600	22,000	
	4/11/1994	130,000	--	--	--	6,300	18,000	2,500	23,000	
	10/20/1994	160,000	--	--	--	5,700	25,000	2,700	35,000	
	4/11/1995	61,000	--	--	--	800	6,200	2,800	18,000	
	3/6/1996	120,000	27,000	<5,000	<500	3,900	13,000	2,300	19,000	
	10/18/1996	350,000	13,000	<5,000	<500	4,800	17,000	7,500	49,000	
	4/10/1997	79,000	7,800	<5,000	<500	1,500	9,400	2,400	19,000	
	10/30/1997	98,000	14,000	<20,000	<2,000	1,200	5,100	2,500	18,000	
	4/7/1998	41,000	<50	<50	18,000	340	2,500	1,400	12,000	
	10/7/1998	38,000	3,500	80	42,000	780	1,400	1,600	14,000	
	4/7/1999	31,000	3,600	850	1,700	210	700	510	4,700	
	10/19/1999	140,000	<50	<50	11,000	11,000	360	3,200	8,400	
	4/26/2000	--	--	--	--	--	--	--	--	Well inaccessible.
	10/31/2000	160,000	4,300	<50	--	1,500	3,000	1,200	14,000	
	2/2/2001	64,000	30,000	<25,000	--	2,300	1,600	870	12,000	
	4/23/2001	50,000	30,000	<12,500	--	870	3,800	790	13,000	
	7/23/2001	54,000	21,000	--	--	1,300	2,700	850	13,000	
	10/23/2001	49,000	13,000	<5,000	--	1,300	230	830	9,500	
	1/22/2002	2,500	4,700	--	--	27	34	18	290	Sample was flagged. See laboratory analytical report for comments.
	4/25/2002	14,000	26,000	1,800	--	620	1,300	590	5,300	

Table 3. Analytic Results for Ground Water - Organic Compounds - Redwood Oil Bulk Plant, 455 Yolanda, Santa Rosa

Sample ID	Date Sampled	TPPH (G)	TPH (D)	TPH (MO)	TPH (K)	Benzene	Toluene	Ethyl benzene	Xylenes	Notes
		<----- ppb ----->								
MW-2 cont.	7/23/2002	9,500	11,000	—	—	830	390	290	1,630	
	10/22/2002	28,000	14,000	7,200	---	1,500	240	760	3,400	
	1/28/2003	1,200	4,200	1,200	---	79	29	61	335	
	4/22/2003	200	3,500	1,500	---	45	2	15	20	
	7/22/2003	470	700	430	---	120	13	27	52	
	1/20/2004	330	1,000	600	---	17	7	11	40	
	7/19/2004	230	760	720	---	24	7	7.6	15.3	
	1/18/2005	470	500	290	---	68	15	22	44.4	
	7/12/2005	<100	<50	<250	---	<0.5	<0.5	<0.5	<1.5	
	1/24/2006	710	160	<250	---	21	6.9	18	43.5	
MW-3	3/14/1991	180,000	8,800	<500	--	18,000	28,000	2,700	15,000	
	6/13/1991	--	--	--	--	--	--	--	--	Well was dry.
	9/11/1991	--	--	--	--	--	--	--	--	Well was dry.
	12/11/1991	--	--	--	--	--	--	--	--	Well was dry.
	3/11/1992	82,000	10,000	--	--	21,000	30,000	2,200	14,000	
	6/15/1992	110,000	14,000	--	--	16,000	25,000	2,200	13,000	
	9/18/1992	89,000	14,000	--	--	20,000	20,000	1,800	10,000	
	12/8/1992	90,000	6,500	--	--	18,000	26,000	1,200	11,500	
	3/10/1993	64,000	6,000	--	--	16,000	12,000	1,700	12,000	
	6/4/1993	86,000	9,200	--	--	11,000	18,000	2,200	7,800	
	10/13/1993	--	--	--	--	--	--	--	--	Well inaccessible.
	4/11/1994	120,000	--	--	--	36,000	35,000	1,800	11,000	
	10/20/1994	130,000	--	--	--	18,000	22,000	2,300	12,000	
	4/11/1995	73,000	--	--	--	11,000	6,900	2,900	8,800	
	3/6/1996	110,000	31,000	<5,000	<500	14,000	11,000	2,900	16,000	
	10/18/1996	120,000	18,000	<5,000	<500	12,000	7,300	2,900	15,000	
	4/9/1997	--	--	--	--	--	--	--	--	No sample due to the presence of free-phase hydrocarbon in the well.
	10/29/1997	--	--	--	--	--	--	--	--	No sample due to the presence of free-phase hydrocarbon in the well.
	4/7/1998	29,000	47,000	<50	51,000	12,000	890	2,200	11,000	
	10/7/1998	59,000	2,200	<1,000	3,400	11,000	470	2,700	9,900	
	4/7/1999	280,000	52,000	6,100	18,000	9,700	660	3,400	14,000	
	10/19/1999	170,000	36,000	<50	<50	12,000	560	4,100	11,000	

Table 3. Analytic Results for Ground Water - Organic Compounds - Redwood Oil Bulk Plant, 455 Yolanda, Santa Rosa

Sample ID	Date Sampled	TPPH (G)	TPH (D)	TPH (MO)	TPH (K)	Benzene	Toluene	Ethyl benzene	Xylenes	Notes
		<----- ppb ----->								
MW-3 cont.	4/26/2000	---	---	---	---	---	---	---	---	Well inaccessible.
	10/31/2000	---	---	---	---	---	---	---	---	Well plugged at 7 feet, therefore not sampled.
	2/2/2001	75,000	16,000	<5,000	---	5,500	550	1,800	3,700	
	4/23/2001	---	---	---	---	---	---	---	---	Well inaccessible.
	7/23/2001	29,000	5,100	—	—	5,200	290	1,400	2,200	
	10/23/2001	59,000	5,600	<6,250	—	6,900	230	1,800	2,900	
	1/22/2002	40,000	26,000	---	—	6,800	400	1,800	3,200	Sample was flagged. See laboratory analytical report for comments.
	4/25/2002	18,000	18,000	1,300	---	7,500	200	1,600	2,400	
	7/23/2002	28,000	16,000	—	—	5,500	190	700	970	
	10/22/2002	35,000	7,300	4,800	---	6,400	210	1,600	1,400	
	1/28/2003	16,000	6,900	570	---	2,700	75	1,300	1,521	
	4/22/2003	18,000	54,000	4,900	---	6,000	100	2,100	2,528	
	7/22/2003	22,000	17,000	1,500	---	6,700	140	2,000	2,033	
	1/20/2004	25,000	48,000	4,500	---	7,400	130	1,900	867	
	7/19/2004	30,000	24,000	1,300	---	7,600	180	2,100	1,011	
	1/18/2005	24,000	11,000	760	---	3,800	85	1,500	750	
	7/12/2005	37,000	27,000	1,400	---	7,600	99	1,600	211	
	1/26/2006	27,000	25,000	2,200	---	6,500	95	1,900	928	
MW-4	3/14/1991	--	--	--	--	--	--	--	--	Well was dry.
	6/13/1991	--	--	--	--	--	--	--	--	Well was dry.
	9/11/1991	--	--	--	--	--	--	--	--	Well was dry.
	12/11/1991	--	--	--	--	--	--	--	--	Well was dry.
	3/11/1992	--	--	--	--	--	--	--	--	Well inaccessible.
	6/15/1992	--	--	--	--	--	--	--	--	Well was dry.
	9/18/1992	--	--	--	--	--	--	--	--	Well was dry.
	12/8/1992	--	--	--	--	--	--	--	--	Well was dry.
	3/10/1993	--	--	--	--	--	--	--	--	Well was dry.
	6/4/1993	--	--	--	--	--	--	--	--	Well was dry.
	10/13/1993	--	--	--	--	--	--	--	--	Well was dry.
	4/11/1994	--	--	--	--	--	--	--	--	Well was dry.
	10/20/1994	--	--	--	--	--	--	--	--	Well was dry.
	4/11/1995	--	--	--	--	--	--	--	--	Well was dry.

Table 3. Analytic Results for Ground Water - Organic Compounds - Redwood Oil Bulk Plant, 455 Yolanda, Santa Rosa

Sample ID	Date Sampled	TPPH (G)	TPH (D)	TPH (MO)	TPH (K)	Benzene	Toluene	Ethyl benzene	Xylenes	Notes
		<----- ppb ----->								
MW-4 cont.	3/6/1996	820	1,100	<500	<50	280	36	9.3	57	
	10/21/1996	2,500	860	<500	<50	920	0.6	5.9	0.79	
	4/10/1997	840	1,200	1,100	<50	<0.5	1.5	2.6	4	
	10/29/1997	810	810	720	<50	170	2	<0.5	1.6	
	4/8/1998	13,000	<50	150	200	290	<0.5	<0.5	66	
	10/7/1998	2,300	<50	<50	<50	7	<0.5	<0.5	<0.5	
	4/7/1999	<5,000	<50	<100	<50	<50	<50	<50	<50	
	10/19/1999	<500,000	<50	---	<50	<5,000	<5,000	<5,000	<5,000	
	4/26/2000	95,000	310	---	---	11	12	7.5	14	
	10/31/2000	1,900	<50	<50	---	32	4.9	4.9	37	
	2/2/2001	200	370	630	---	23	<0.5	<0.5	<0.5	
	4/23/2001	30,000	460	480	---	<0.5	<0.5	<0.5	<0.5	
	7/23/2001	4,100	600	—	—	25	16	7.7	37	
	10/23/2001	5,500	400	<500	—	0.85	<5	<5	<5	
	1/22/2002	370	79	---	—	20	6.9	4.1	17	Sample was flagged. See laboratory analytical report for comments.
	4/25/2002	140	72	<250	---	20	25	4	18	
	7/23/2002	180	<50	—	—	15	24	4	16	
	10/22/2002	2,600	140	<250	---	120	31	18	75	
	1/27/2003	130	<50	<250	---	47	7	5	23	
	4/22/2003	77	110	<250	---	16	3	3	11	
	7/22/2003	210	160	<250	---	60	11	8	34	
	1/20/2004	62	82	<250	---	9	6	4	11	
	7/19/2004	<50	79	<250	---	<0.5	<0.5	<0.5	<1.5	
	1/18/2005	190	<50	<250	---	30	14	4.7	28.6	
	7/12/2005	<100	<50	<250	---	4.7	0.6	0.9	2.4	
	1/23/2006	320	60	<250	---	54	12	14	44.4	

Table 3. Analytic Results for Ground Water - Organic Compounds - Redwood Oil Bulk Plant, 455 Yolanda, Santa Rosa

Sample ID	Date Sampled	TPPH (G)	TPH (D)	TPH (MO)	TPH (K)	Benzene	Toluene	Ethyl benzene	Xylenes	Notes
		<----- ppb ----->								
MW-5	6/13/1991	<50	<50	<500	--	0.94	1.1	0.5	<0.5	Samples analyzed for Oil and Grease by Standard Methods Method 5520 B&F and were reported as <5,000 ppb.
	9/11/1991	90	<50	<500	--	29	14	5.4	16	Samples analyzed for Oil and Grease by Standard Methods Method 5520 B&F and were reported as <5,000 ppb.
	12/11/1991	<50	<50	--	--	10	7.3	4.1	12	
	3/11/1992	<50	640	--	--	0.9	1.1	<0.5	1.9	
	6/15/1992	<50	<50	--	--	<0.5	<0.5	<0.5	<0.5	
	9/18/1992	<50	<50	--	--	<0.5	<0.5	<0.5	<0.5	
	12/8/1992	<50	<50	--	--	<0.5	<0.5	<0.5	<0.5	
	3/10/1993	<50	<50	--	--	<0.5	<0.5	<0.5	<0.5	
	6/4/1993	<50	<50	--	--	<0.5	<0.5	<0.5	<0.5	
	10/13/1993	70	--	--	--	2.2	3.4	1.4	5.2	
	4/11/1994	<50	--	--	--	<0.5	<0.5	<0.5	<0.5	
	10/20/1994	<50	--	--	--	2.6	3.7	<0.5	<0.5	
	4/11/1995	80	--	--	--	3	6.6	2.6	14	
	3/6/1996	<50	<50	<500	<50	1.2	7.3	0.5	2.4	
	10/18/1996	<50	<50	<500	<50	<0.5	<0.5	<0.5	0.6	
	4/9/1997	<50	70	<500	<50	<0.5	0.7	<0.5	<0.5	
	10/29/1997	<50	<50	<500	<50	<0.5	<0.5	<0.5	<0.5	
	4/7/1998	<50	<50	<50	<50	<0.5	<0.5	<0.5	<0.5	
	10/7/1998	<50	<50	<50	<50	<0.5	<0.5	<0.5	<0.5	
	4/7/1999	<50	<50	<100	<50	<0.5	<0.5	<0.5	<0.5	
	10/19/1999	<50	<50	--	<50	<0.5	<0.5	<0.5	<0.5	
	4/26/2000	<50	<50	--	--	<0.5	<0.5	<0.5	<0.5	
	10/31/2000	--	--	--	--	--	--	--	--	Well inaccessible.
	2/2/2001	110	640	910	--	11	4.3	4.6	24	
	10/23/2001	100	200	250	--	8.2	1.3	5	19	
	1/28/2003	72	120	340	--	21	2	5	10	

Table 3. Analytic Results for Ground Water - Organic Compounds - Redwood Oil Bulk Plant, 455 Yolanda, Santa Rosa

Sample ID	Date Sampled	TPPH (G)	TPH (D)	TPH (MO)	TPH (K)	Benzene	Toluene	Ethyl benzene	Xylenes	Notes
		<----- ppb ----->								
MW-5A	10/18/1996	<50	<50	<500	<50	<0.5	0.6	<0.5	0.6	
	4/10/1997	240	140	<500	<50	16	28	9.9	56	
	10/29/1997	<50	<50	<500	<50	<0.5	<0.5	<0.5	<0.5	
	4/7/1998	<50	<50	<50	<50	<0.5	<0.5	<0.5	<0.5	
	10/7/1998	<50	<50	<50	<50	<0.5	<0.5	<0.5	<0.5	
	4/7/1999	<50	<50	220	<50	<0.5	<0.5	<0.5	<0.5	
	10/19/1999	--	--	--	--	--	--	--	--	Well inaccessible.
	4/26/2000	<50	<50	---	---	<0.5	<0.5	<0.5	<0.5	
	10/31/2000	---	---	---	---	---	---	---	---	Well inaccessible.
	2/2/2001	190	410	590	---	18	10	6.8	49	
	10/23/2001	140	110	<250	---	15	1.7	8.5	32	
	1/28/2003	1,500	620	260	---	320	19	83	143	
MW-7	6/13/1991	<50	<250	4,700	--	<0.5	1.6	1.3	2.9	
	9/11/1991	<50	<50	<500	--	14	7.6	3.5	10	
	12/11/1991	<50	<50	--	--	1.8	1.1	0.8	2.5	
	3/11/1992	<50	<50	--	--	<0.5	<0.5	<0.5	<0.5	
	6/15/1992	120	190	--	--	4.3	3.1	14	24	
	9/18/1992	<50	<50	--	--	<0.5	<0.5	<0.5	<0.5	
	12/8/1992	<50	<50	--	--	<0.5	<0.5	<0.5	<0.5	
	3/10/1993	<50	1,200	--	--	<0.5	<0.5	<0.5	<0.5	
	6/4/1993	<50	<50	--	--	<0.5	<0.5	<0.5	<0.5	
	10/13/1993	500	--	--	--	<0.5	<0.5	2.2	9.6	
	4/11/1994	120	--	--	--	3.6	4.7	1.9	9.1	
	10/20/1994	70	--	--	--	6.9	13	1.9	5.2	
	4/11/1995	50	--	--	--	2.6	6.4	2.7	14	
	3/6/1996	<50	<50	600	<50	<0.5	3.4	<0.5	1	
	10/18/1996	<50	280	<500	<50	<0.5	8.3	<0.5	<0.5	
	4/9/1997	<50	160	<500	<50	<0.5	<0.5	<0.5	<0.5	
	10/29/1997	<50	80	<500	<50	<0.5	1.1	<0.5	1.8	
	4/7/1998	<50	<50	<50	<50	3.9	<0.5	1.7	6.8	
	10/7/1998	<50	<50	<50	<50	<0.5	<0.5	<0.5	<0.5	
	4/7/1999	<50	130	110	<50	<0.5	<0.5	<0.5	<0.5	
	10/19/1999	<50	<50	--	<50	<0.5	<0.5	<0.5	<0.5	
	4/26/2000	<50	<50	---	---	<0.5	<0.5	<0.5	<0.5	

Table 3. Analytic Results for Ground Water - Organic Compounds - Redwood Oil Bulk Plant, 455 Yolanda, Santa Rosa

Sample ID	Date Sampled	TPPH (G)	TPH (D)	TPH (MO)	TPH (K)	Benzene	Toluene	Ethyl benzene	Xylenes	Notes
		<----- ppb ----->								
MW-7 cont.	10/31/2000	12,000	<50	<50	---	3,800	26	79	51	
	4/23/2001	61	92	<250	---	4.9	2.1	1.3	5.2	
	10/23/2001	<50	71	<250	---	<0.5	<0.5	<0.5	<0.5	
	1/27/2003	81	<50	<250	---	21	5	3	15	
	1/20/2004	140	69	350	---	17	21	6	26	
	1/18/2005	140	<50	<250	---	12	11	2.3	19.9	
	1/23/2006	130	<50	<250	---	16	3.5	4.8	13.2	
MW-8	6/13/1991	<50	<50	<500	--	<0.5	<0.5	<0.5	<0.5	
	9/11/1991	90	<50	600	--	21	10	4.2	12	
	12/11/1991	<50	<50	--	--	0.9	<0.5	<0.5	0.6	
	3/11/1992	<50	<50	--	--	<0.5	<0.5	<0.5	<0.5	
	6/15/1992	<50	280	--	--	<0.5	<0.5	<0.5	<0.5	
	9/18/1992	<50	<50	--	--	<0.5	<0.5	<0.5	<0.5	
	12/8/1992	<50	<50	--	--	<0.5	<0.5	<0.5	<0.5	
	3/10/1993	<50	140	--	--	<0.5	<0.5	<0.5	<0.5	
	6/4/1993	<50	100	--	--	<0.5	<0.5	<0.5	<0.5	
	10/13/1993	<50	--	--	--	4.5	7.5	2.2	8.4	
	4/11/1994	<50	--	--	--	2.3	2.4	1	5	
	10/20/1994	110	--	--	--	4.1	5.2	<0.5	0.8	
	4/11/1995	280	--	--	--	24	38	10	57	
	3/6/1996	60	<50	<500	<50	0.7	6.1	<0.5	2.1	
	10/21/1996	<50	290	<500	<50	<0.5	<0.5	<0.5	<0.5	
	4/10/1997	58	260	<500	<50	4.9	10	1.1	7.8	
	10/30/1997	<50	300	<500	<50	<0.5	<0.5	<0.5	<0.5	
	4/8/1998	62	<50	<50	<50	8.4	0.86	2.7	10	
	10/7/1998	<50	<50	<50	<50	<0.5	<0.5	<0.5	<0.5	
	4/7/1999	<50	<50	380	<50	<0.5	<0.5	<0.5	<0.5	
	10/19/1999	<1,250	<50	--	<50	<13	<13	<13	<13	
	4/26/2000	<50	<50	--	--	<0.5	<0.5	<0.5	<0.5	
	10/31/2000	<50	<50	<50	--	<0.5	<0.5	<0.5	<0.5	
	10/23/2001	280	180	<250	--	<0.5	<0.5	<0.5	<0.5	
	1/27/2003	<50	100	<250	--	6	2	<1	6	

Table 3. Analytic Results for Ground Water - Organic Compounds - Redwood Oil Bulk Plant, 455 Yolanda, Santa Rosa

Sample ID	Date Sampled	TPPH (G)	TPH (D)	TPH (MO)	TPH (K)	Benzene	Toluene	Ethyl benzene	Xylenes	Notes
		<----- ppb ----->								
MW-9	10/18/1996	110	<50	<500	<50	<1.0	<1.0	<1.0	3.6	
	4/10/1997	74	330	<500	<50	17	1.4	0.77	1.6	
	10/29/1997	140	220	<500	<50	<0.5	<0.5	<0.5	<0.5	
	4/8/1998	82	<50	<50	<50	2.8	0.5	1.5	5.7	
	10/7/1998	<50	<50	<50	<50	<0.5	<0.5	<0.5	<0.5	
	4/7/1999	<50	<50	190	<50	<0.5	1.1	0.85	1.6	
	10/19/1999	<500	<50	--	<50	<0.5	<0.5	<0.5	<0.5	
	4/26/2000	<50	<50	--	--	<0.5	<0.5	<0.5	<0.5	
	10/31/2000	<50	<50	<50	--	<0.5	<0.5	<0.5	<0.5	
	10/23/2001	270	<50	<250	--	<0.5	<0.5	<0.5	<0.5	
	1/27/2003	<50	98	<250	--	10	3	<1	6	
	1/20/2004	<50	100	<250	--	2	9	1	8	
	1/18/2005	140	100	<250	--	18	10	4.7	6.5	
	1/24/2006	<100	<50	<250	--	8.3	5.5	2.1	10.1	
MW-10	4/26/2000	28,000	14,000	--	--	1,000	60	660	1,700	
	10/31/2000	89,000	13,000	<50	--	12,000	480	2,800	11,000	
	2/2/2001	96,000	32,000	<5,000	--	12,000	3,300	2,700	13,000	
	4/23/2001	56,000	47,000	<12,500	--	9,900	1,800	2,400	8,800	
	7/23/2001	78,000	51,000	--	--	13,000	3,400	2,500	12,000	
	10/23/2001	90,000	28,000	9,700	--	17,000	3,600	2,700	12,000	
	1/22/2002	64,000	9,600	--	--	7,200	1,200	2,200	8,200	Sample was flagged. See laboratory analytical report for comments.
	4/25/2002	39,000	19,000	960	--	14,000	5,000	2,600	12,800	
	7/23/2002	59,000	14,00	--	--	11,000	2,400	1,900	9,000	
	10/22/2002	82,000	26,000	16,000	--	12,000	1,700	2,200	9,800	
	1/27/2003	29,000	12,000	960	--	8,800	1,100	1,500	6,100	
	4/22/2003	20,000	6,100	470	--	4,800	500	1,300	5,330	
	7/22/2003	35,000	12,000	870	--	8,800	1,100	1,700	7,100	
	1/20/2004	18,000	4,800	330	--	3,400	230	970	2,870	
	1/18/2005	20,000	15,000	820	--	3,200	170	800	2,410	
	1/23/2006	29,000	9,600	370	--	3,700	150	1,600	4,410	

Table 3. Analytic Results for Ground Water - Organic Compounds - Redwood Oil Bulk Plant, 455 Yolanda, Santa Rosa

Sample ID	Date Sampled	TPPH (G)	TPH (D)	TPH (MO)	TPH (K)	Benzene	Toluene	Ethyl benzene	Xylenes	Notes
----- ppb -----										
MW-11	5/8/2000	<50	<50	<50	<50	<0.5	<0.5	<0.5	<0.5	
	10/31/2000	---	---	---	---	---	---	---	---	
	2/2/2001	---	---	---	---	---	---	---	---	
MW-12	5/8/2000	<50	<50	<50	<50	<0.5	<0.5	<0.5	<0.5	
	10/31/2000	---	---	---	---	---	---	---	---	
	2/2/2001	---	---	---	---	---	---	---	---	
MW-13	5/8/2000	<50	<50	<50	<50	<0.5	<0.5	<0.5	<0.5	
	10/31/2000	---	---	---	---	---	---	---	---	
	2/2/2001	---	---	---	---	---	---	---	---	Well was abandoned.
MW-14	5/8/2000	<50	<50	<50	<50	<0.5	<0.5	<0.5	<0.5	
	10/31/2000	---	---	---	---	---	---	---	---	
	2/2/2001	---	---	---	---	---	---	---	---	Well was abandoned.
MW-15	5/8/2000	<50	<50	<50	<50	<0.5	<0.5	<0.5	<0.5	
	10/31/2000	<50	<50	<50	---	<0.5	<0.5	<0.5	<0.5	
	10/23/2001	<50	<50	<294	---	<0.5	<0.5	<0.5	<0.5	
	1/27/2003	<50	<50	<250	---	5	2	<1	5	
MW-16	5/8/2000	<50	<50	<50	<50	<0.5	<0.5	<0.5	<0.5	
	10/31/2000	<50	<50	<50	---	<0.5	<0.5	<0.5	<0.5	
	10/23/2001	<50	<50	<338	---	<0.5	<0.5	<0.5	<0.5	
	1/27/2003	<50	<50	<250	---	5	2	<1	5	
MW-17	5/8/2000	<50	<50	<50	<50	<0.5	<0.5	<0.5	<0.5	
	10/31/2000	<50	<50	<50	---	<0.5	<0.5	<0.5	<0.5	
	10/23/2001	<50	<50	<250	---	<0.5	<0.5	<0.5	<0.5	
MW-18	5/8/2000	<50	<50	<50	<50	<0.5	<0.5	<0.5	<0.5	
	10/31/2000	<50	<50	<50	---	<0.5	<0.5	<0.5	<0.5	
	10/23/2001	<50	<69	<347	---	<0.5	<0.5	<0.5	<0.5	
	1/27/2003	<50	<50	<250	---	<1	<1	<1	<1	

Table 3. Analytic Results for Ground Water - Organic Compounds - Redwood Oil Bulk Plant, 455 Yolanda, Santa Rosa

Sample ID	Date Sampled	TPPH (G)	TPH (D)	TPH (MO)	TPH (K)	Benzene	Toluene	Ethyl benzene	Xylenes	Notes
		<----- ppb ----->								
MW-19	5/8/2000	<50	<50	<50	<50	<0.5	<0.5	<0.5	<0.5	
	10/31/2000	<50	<50	<50	---	<0.5	<0.5	<0.5	<0.5	
	10/23/2001	<50	<50	<329	---	<0.5	<0.5	<0.5	<0.5	
MW-20	6/8/2000	<50	<50	<50	<50	<0.5	<0.5	<0.5	<0.5	
	10/31/2000	<50	<50	<50	---	<0.5	<0.5	<0.5	<0.5	
	10/23/2001	<50	<50	<250	---	0.6	1.2	<0.5	<0.5	
V-1	6/13/1991	78,000	9,600	<2,500	--	15,000	13,000	1,800	12,000	
	9/11/1991	150,000	180,000	<500	--	16,000	17,000	1,800	16,000	
	12/11/1991	--	--	--	--	--	--	--	--	Well was dry.
	3/11/1992	210,000	42,000	--	--	8,600	16,000	2,500	15,000	
	6/15/1992	59,000	31,000	--	--	8,800	9,800	2,200	12,000	
	9/18/1992	150,000	110,000	--	--	9,300	7,900	1,100	17,000	
	12/8/1992	74,000	30,000	--	--	12,000	3,100	640	9,400	
	3/10/1993	56,000	11,000	--	--	8,300	21,000	2,300	26,000	
	6/4/1993	29,000	8,300	--	--	3,200	2,900	640	7,100	
	10/14/1993	82,000	--	--	--	7,300	2,700	1,300	12,000	
	4/11/1994	62,000	--	--	--	9,600	630	1,800	12,000	
	10/20/1994	51,000	--	--	--	6,000	270	1,000	8,900	
	4/11/1995	37,000	--	--	--	5,900	290	1,400	7,800	
	3/6/1996	46,000	20,000	<5,000	<500	6,800	310	1,900	7,300	
	10/18/1996	29,000	38,000	25,000	<1,000	4,700	<100	1,200	3,700	
	4/9/1997	27,000	8,100	<5,000	<500	3,900	77	1,800	5,200	
	10/29/1997	--	--	--	--	--	--	--	--	No sample due to the presence of free-phase hydrocarbon in the well.
	4/7/1998	22,000	2,900	<50	<50	2,900	140	980	1,900	
	10/7/1998	47,000	1,200	<1,000	1,200	2,000	44	1,200	1,500	
	4/7/1999	19,000	15,000	5,600	4,300	1,500	22	1,000	1,100	
	10/19/1999	14,000	<50	<50	3,200	880	<50	690	630	
	4/26/2000	12,000	1,700	---	---	910	28	840	610	
	10/31/2000	19,000	3,000	<50	---	3,200	<12.0	1,600	640	
	2/26/2001	6,800	2,800	1,300	---	430	<25	490	260	
	4/23/2001	7,600	3,300	1,600	---	1,400	17	690	330	
	7/23/2001	10,000	2,900	---	---	2,300	17	940	230	

Table 3. Analytic Results for Ground Water - Organic Compounds - Redwood Oil Bulk Plant, 455 Yolanda, Santa Rosa

Sample ID	Date Sampled	TPPH (G)	TPH (D)	TPH (MO)	TPH (K)	Benzene	Toluene	Ethyl benzene	Xylenes	Notes
		<----- ppb ----->								
V-1 cont.	10/23/2001	11,000	2,300	1,400	---	2,800	<50	110	240	
	1/22/2002	12,000	2,600	---	---	2,500	50	1,100	480	Sample was flagged. See laboratory analytical report for comments.
	4/25/2002	4,100	4,900	1,600	---	1,700	21	540	180	
	7/23/2002	6,700	4,100	---	---	1,400	29	240	139	
	1/28/2003	2,200	4,800	2,200	---	310	5	100	24	
	7/22/2003	4,000	4,200	1,000	---	940	10	130	46	
V-2	6/13/1991	--	--	--	--	--	--	--	--	Well was dry.
	9/11/1991	--	--	--	--	--	--	--	--	Well was dry.
	12/11/1991	--	--	--	--	--	--	--	--	Well was dry.
	3/11/1992	55,000	4,000	--	--	16,000	2,100	620	1,500	
	6/15/1992	--	--	--	--	--	--	--	--	This well did not contain sufficient water for sampling.
	9/18/1992	--	--	--	--	--	--	--	--	Well was dry.
	12/8/1992	19,000	5,100	--	--	7,300	160	<5	350	
	3/10/1993	25,000	3,200	--	--	3,800	20	140	67	
	6/4/1993	33,000	3,800	--	--	6,100	41	100	91	
	10/13/1993	--	--	--	--	--	--	--	--	Well was dry.
	4/11/1994	32,000	--	--	--	4,000	18	30	20	
	10/20/1994	--	--	--	--	--	--	--	--	Well was dry.
	4/11/1995	34,000	--	--	--	2,200	19	150	21	
	3/6/1996	<5,000	<100	3,400	<100	430	<50	<50	110	
	10/18/1996	100,000	12,000	14,000	<1,000	1,800	1,200	530	2,000	
	4/9/1997	6,200	11,000	11,000	<1,000	2,800	19	76	12	
	10/30/1997	8,000	9,800	9,600	<250	3,400	22	58	13	
	4/7/1998	6,700	500	<50	<50	2,600	24	50	74	
	10/7/1998	5,000	1,000	<50	460	1,800	11	18	9.2	
	4/7/1999	8,100	5,400	1,300	<100	1,600	<50	<50	<50	
	10/19/1999	210,000	<50	<50	260	1,500	<500	1,200	6,900	
	4/26/2000	39,000	610	---	---	450	11	24	12	
	10/31/2000	170	4,700	<50	---	10	1.5	6.9	22	
	2/26/2001	43,000	9,800	<5,000	---	4,200	64	97	<50	
	4/23/2001	31,000	610,000	<166,500	---	2,000	<100	160	<100	

Table 3. Analytic Results for Ground Water - Organic Compounds - Redwood Oil Bulk Plant, 455 Yolanda, Santa Rosa

Sample ID	Date Sampled	TPPH (G)	TPH (D)	TPH (MO)	TPH (K)	Benzene	Toluene	Ethyl benzene	Xylenes	Notes
----- ppb -----										
V-2 cont.	7/23/2001	---	---	---	---	---	---	---	---	Well no longer sampled. It has been switched to a SVE (soil vapor extraction) well.
DW-1	6/13/1991	790	280	<500	--	390	14	16	34	Samples analyzed for Oil and Grease by Standard Methods Method 5520 B&F and were reported as <5,000 ppb.
	9/11/1991	660	<50	<500	--	340	7.5	6.6	19	
	9/11/1991	--	--	--	--	--	--	--	--	
	12/11/1991	200	4,700	--	--	23	<0.5	0.6	2.2	Well was abandoned.
DW-2	3/6/1996	<50	<50	--	--	5.4	<0.5	<0.5	<0.5	
	10/21/1996	57	<50	--	--	17	<0.5	<0.5	0.5	
	4/10/1997	<50	60	<500	<50	18	<0.5	<0.5	0.6	
	10/30/1997	65	--	--	--	24	<0.5	<0.5	0.6	
	4/8/1998	<50	<50	<50	<50	19	<0.5	<0.5	<0.5	
	10/7/1998	93	<50	<50	<50	19	<0.5	<0.5	<0.5	
	4/7/1999	<500	110	100	<50	<0.5	5.9	<0.5	<0.5	
	8/30/1999	---	---	---	---	---	---	---	---	Well was abandoned.
DW-468	4/2/1998	<50	<50	<50	<50	<0.5	<0.5	<0.5	<0.5	
	7/31/1998	<50	<50	<50	<50	<0.5	<0.5	<0.5	<0.5	
	10/7/1998	<50	--	--	--	<0.5	<0.5	<0.5	<0.5	
	4/7/1999	<50	--	--	--	<0.5	<0.5	<0.5	<0.5	
	10/19/1999	<50	--	--	--	<0.5	<0.5	<0.5	<0.5	
	4/26/2000	<50	--	--	--	<0.5	<0.5	<0.5	<0.5	
	5/26/2000	<50	--	--	--	<0.5	<0.5	<0.5	<0.5	
	6/26/2000	<50	--	--	--	<0.5	<0.5	<0.5	<0.5	
	7/21/2000	<50	--	--	--	<0.5	<0.5	<0.5	<0.5	
	8/29/2000	<50	--	--	--	<0.5	<0.5	<0.5	<0.5	
	10/2/2000	<50	--	--	--	<0.5	<0.5	<0.5	<0.5	
	10/31/2000	<50	--	--	--	<0.5	<0.5	<0.5	<0.5	
	11/30/2000	<50	--	--	--	<0.5	<0.5	<0.5	<0.5	
	12/19/2000	<50	--	--	--	<0.5	<0.5	<0.5	<0.5	
	2/2/2001	<50	<50	--	--	<0.5	<0.5	<0.5	<0.5	Well has been taken out of service.

Table 3. Analytic Results for Ground Water - Organic Compounds - Redwood Oil Bulk Plant, 455 Yolanda, Santa Rosa

Sample ID	Date Sampled	TPPH (G)	TPH (D)	TPH (MO)	TPH (K)	Benzene	Toluene	Ethyl benzene	Xylenes	Notes
<----- ppb ----->										

EXPLANATION:

TPPH(G) = Total Purgeable Petroleum Hydrocarbons as Gasoline

ppb = parts per billion

TPH(D) = Total Petroleum Hydrocarbons as Diesel

-- = Not analyzed/Not applicable

TPH(K) = Total Petroleum Hydrocarbons as Kerosene

ND = Not detected (see note)

TPH (MO) = Diesel-range Motor Oil

Table 4. Analytical Results for Ground Water - Fuel Oxygenates Lead Scavengers - Redwood Oil Bulk Plant - 455 Yolanda Avenue, Santa Rosa, California

Well ID	Sample Date	Tert-	MTBE	Diisopropyl	Ethyl-tert-butyl-	Lead	Tert-Amylmethyl	Notes
		Butanol		Ether	ether	Scavengers	ether	
MW-1	3/6/1996	---	830	---	---	---	---	ppb
	10/18/1996	---	400	---	---	---	---	
	4/9/1997	---	900	---	---	---	---	
	10/29/1997	---	360	---	---	---	---	
	4/7/1998	---	63,000	---	---	---	---	
	10/7/1998	ND	25,000	ND	ND	---	ND	
	4/7/1999	---	1,700	---	---	---	---	
	10/19/1999	---	3,200	---	---	---	---	
	4/26/2000	---	---	---	---	---	---	
	10/31/2000	500	740	<120	<120	<50	<120	No lead was detected at detection limits of 1,000 ppb.
	2/2/2001	<200	660	<50	<50	<50	<50	
	4/23/2001	670	3,800	<100	<100	<100	<100	
	7/23/2001	100	750	<25	<25	<25	<25	
	10/23/2001	110	1,300	<25	<25	<25	<25	
	1/22/2002	24	7.2	<5	<5	—	<5	
	4/25/2002	<200	22	<1	<1	<1	<1	
	7/23/2002	<200	16	<1	<1	<1	1	
	1/29/2003	<200	<1	<1	<1	<1	<1	
	7/22/2003	<200	8	<1	<1	<1	<1	
	1/20/2004	<5	4	<1	<1	<1	<1	
	1/18/2005	<5	2.9	<0.5	<0.5	<1	1	
	1/24/2006	<5	2.2	<0.5	<0.5	<1	<0.5	
MW-2	3/6/1996	---	250,000	---	---	---	---	
	10/18/1996	---	600,000	---	---	---	---	
	4/10/1997	---	210,000	---	---	---	---	
	10/30/1997	36	200,000	---	---	---	11	
	4/7/1998	---	35,000	---	---	---	---	
	10/7/1998	ND	100,000	ND	ND	---	ND	
	4/7/1999	---	4,200	---	---	---	---	
	10/19/1999	---	110,000	---	---	---	---	
	4/26/2000	---	---	---	---	---	---	

Table 4. Analytical Results for Ground Water - Fuel Oxygenates Lead Scavengers - Redwood Oil Bulk Plant - 455 Yolanda Avenue, Santa Rosa, California

Well ID	Sample Date	Tert-	MTBE	Diisopropyl	Ethyl-tert-butyl-	Lead	Tert-Amylmethyl	Notes
		Butanol		Ether	ether	Scavengers	ether	
-----ppb----->								
MW-2 cont.	10/31/2000	22,000	32,000	<5000	<5000	<2000	<5000	No lead was detected at detection limits of 1,000 ppb.
	2/2/2001	<10,000	31,000	<2,500	<2,500	<2,500	<2,500	
	4/23/2001	15,000	8,900	<500	<500	<500	<500	
	7/23/2001	7,600	17,000	<1,000	<1,000	<1,000	<1,000	
	10/23/2001	6,500	14,000	<250	<250	<250	590	
	2/21/2002	1,300	210	<50	<50	—	<50	
	4/25/2002	2,100	1,300	<10	<10	<10	83	
	7/23/2002	1,800	3,400	<1	<1	<1	140	
	10/22/2002	4,000	14,000	<1,250	<1,250	<1,250	<1,250	
	1/28/2003	260	590	<1	<1	<1	18	
	4/22/2003	<200	100	<1	<1	<1	4	
	7/22/2003	<200	38	<1	<1	<1	3	
	1/20/2004	<5	16	<1	<1	<1	2	
	7/19/2004	<5	22	<0.5	<0.5	<0.5	4.7	
	1/18/2004	<5	13	<0.5	<0.5	<1	2.5	
MW-3	10/12/2005	<5	8.0	<0.5	<0.5	<0.5	<0.5	
	1/24/2006	35	13	<0.5	<0.5	<1	0.9	
	3/6/1996	---	190,000	---	---	---	---	
	10/18/1996	---	370,000	---	---	---	---	
	4/9/1997	---	---	---	---	---	---	
	10/29/1997	---	---	---	---	---	---	
	4/7/1998	---	230,000	---	---	---	---	
	10/7/1998	ND	190,000	ND	ND	---	ND	
	4/7/1999	---	110,000	---	---	---	---	
	10/19/1999	---	95,000	---	---	---	---	
	4/26/2000	---	---	---	---	---	---	
	10/31/2000	---	---	---	---	---	---	Well plugged at seven feet, therefore not sampled.
	2/2/2001	11,000	41,000	<2,500	<2,500	<2,500	<2,500	
	4/23/2001	---	---	---	---	---	---	Well inaccessible
	7/23/2001	12,000	38,000	<1,000	<1,000	<1,000	1,800	
	10/23/2001	<20,000	62,000	<5,000	<5,000	<5,000	<5,000	
	1/22/2002	32,000	14,000	<2,500	<2,500	—	3,300	

Table 4. Analytical Results for Ground Water - Fuel Oxygenates Lead Scavengers - Redwood Oil Bulk Plant - 455 Yolanda Avenue, Santa Rosa, California

Well ID	Sample Date	Tert-	MTBE	Diisopropyl	Ethyl-tert-butyl-	Lead	Tert-Amylmethyl	Notes
		Butanol		Ether	ether	Scavengers	ether	
-----ppb----->								
MW-3 cont.	4/25/2002	<20,000	34,000	<100	<100	<100	770	
	7/23/2002	6,300	39,000	<1	6	<1	940	
	10/22/2002	<5,000	25,000	<2,500	<2,500	<2,500	<2,500	
	1/28/2003	2,900	15,000	<1	2	<1	450	
	4/22/2003	7,100	39,000	<1	4	<1	1,400	
	7/22/2003	16,000	47,000	<1	6	<1	1,400	
	1/20/2004	3,100	42,000	<1	4	1	1,200	
	7/19/2004	17,000	47,000	<5	7	<5	1,900	
	1/18/2005	4,100	25,000	<25	<25	<50	850	
	7/12/2005	11,000	38,000	<0.5	5.9	<1	900	
MW-4	1/23/2006	980	22,000	<0.5	2.2	<1	1,000	
	3/6/1996	---	6,400	---	---	---	---	
	10/21/1996	---	52,000	---	---	---	---	
	4/10/1997	---	95,000	---	---	---	---	
	10/29/1997	---	95,000	---	---	---	---	
	4/8/1998	---	34,000	---	---	---	---	
	10/7/1998	ND	170,000	ND	ND	---	ND	
	4/7/1999	---	87,000	---	---	---	---	
	10/19/1999	---	100,000	---	---	---	---	
	4/26/2000	130,000	170,000	<5,000	<5,000	---	<5,000	
	10/31/2000	36,000	54,000	<5,000	<5,000	---	<5,000	
	2/2/2001	<40	130	<10	<10	<10	68	
	4/23/2001	19,000	58,000	<1,000	<1,000	<1,000	1,500	
	7/23/2001	<10,000	49,000	<2,500	<2,500	<2,500	<2,500	
	10/23/2001	13,000	54,000	<1,250	<1,250	<1,250	1,400	
	1/22/2002	2,500	1,300	<125	<125	—	160	
	4/25/2002	<2,000	3,200	<10	<10	<10	65	
	7/23/2002	200	4,200	<1	<1	<1	60	
	10/22/2002	<500	4,200	<250	<250	<250	<250	
	1/27/2003	<200	70	<1	<1	<1	2	
	4/22/2003	<200	380	<1	<1	<1	6	
	7/22/2003	<200	900	<1	<1	<1	15	
	1/20/2004	<5	19	<1	<1	<1	1	

Table 4. Analytical Results for Ground Water - Fuel Oxygenates Lead Scavengers - Redwood Oil Bulk Plant - 455 Yolanda Avenue, Santa Rosa, California

Well ID	Sample Date	Tert-	MTBE	Diisopropyl	Ethyl-tert-butyl-	Lead	Tert-Amylmethyl	Notes
		Butanol		Ether	ether	Scavengers	ether	
-----ppb----->								
MW-4 cont.	7/19/2004	<5	530	<0.5	<0.5	<0.5	<0.5	8
	1/18/2005	<5	3.8	<0.5	<0.5	<1	<1	1.8
	7/12/2005	7.0	69	<0.5	<0.5	<1	<1	0.9
	1/23/2006	<5	3.3	<0.5	<0.5	<1	<0.5	
MW-5	3/6/1996	---	<5	---	---	---	---	
	10/18/1996	---	<5	---	---	---	---	
	4/9/1997	---	<5	---	---	---	---	
	10/29/1997	---	<5	---	---	---	---	
	4/7/1998	---	24	---	---	---	---	
	10/7/1998	ND	<5	ND	ND	---	ND	
	4/7/1999	---	<0.5	---	---	---	---	
	10/19/1999	---	67	---	---	---	---	
	4/26/2000	<10	<2.03	<5.0	<5.0	---	<5.0	
	10/31/2000	---	---	---	---	---	---	Well inaccessible
	2/2/2001	<20	<5.0	<5.0	<5.0	<5.0	<5.0	
	10/23/2001	<20	<5	<5	<5	<5	<5	
	1/28/2003	<200	2	<1	<1	<1	<1	
MW-5A	10/18/1996	---	<5	---	---	---	---	
	4/10/1997	---	26	---	---	---	---	
	10/29/1997	---	<5	---	---	---	---	
	4/7/1998	---	<5	---	---	---	---	
	10/7/1998	ND	<5	ND	ND	---	ND	
	4/7/1999	---	<0.5	---	---	---	---	
	10/19/1999	---	---	---	---	---	---	
	4/26/2000	<10	<2.03	<5.0	<5.0	---	<5.0	
	10/31/2000	---	---	---	---	---	---	Well inaccessible
	2/2/2001	<20	7.1	<5.0	<5.0	<5.0	<5.0	
	10/23/2001	<20	<5	<5	<5	<5	<5	
	1/28/2003	280	1,900	<1	<1	<1	<1	58

Table 4. Analytical Results for Ground Water - Fuel Oxygenates Lead Scavengers - Redwood Oil Bulk Plant - 455 Yolanda Avenue, Santa Rosa, California

Well ID	Sample Date	Tert-	MTBE	Diisopropyl	Ethyl-tert-butyl-	Lead	Tert-Amylmethyl	Notes
		Butanol		Ether	ether	Scavengers	ether	
MW-7	3/6/1996	---	10	---	---	---	---	ppb
	10/18/1996	---	60	---	---	---	---	
	4/9/1997	---	<5	---	---	---	---	
	10/29/1997	---	17	---	---	---	---	
	4/7/1998	---	9.6	---	---	---	---	
	10/7/1998	ND	<5	ND	ND	---	ND	
	4/7/1999	---	31	---	---	---	---	
	10/19/1999	---	3.6	---	---	---	---	
	4/26/2000	<10	<2.03	<5.0	<5.0	---	<5.0	
	10/31/2000	41,000	63,000	<5000	<5000	<2000	<5000	No lead was detected at detection limits of 1,000 ppb.
	4/23/2001	<20	15	<5.0	<5.0	<5.0	<5.0	
	10/23/2001	<20	11	<5	<5	<5	<5	
	1/27/2003	<200	890	<1	<1	<1	19	
	1/20/2004	24	290	<1	<1	<1	18	
	1/18/2005	93	1,300	<0.5	<0.5	<1	22	
	1/23/2006	<5	190	<0.5	<0.5	<1	4.4	
MW-8	3/6/1996	---	6	---	---	---	---	ppb
	10/21/1996	---	<5	---	---	---	---	
	4/10/1997	---	<5	---	---	---	---	
	4/10/1997	---	<5	---	---	---	---	
	10/30/1997	---	<5	---	---	---	---	
	4/8/1998	---	29	---	---	---	---	
	10/7/1998	ND	75	ND	ND	---	ND	
	4/7/1999	---	280	---	---	---	---	
	10/19/1999	---	250	---	---	---	---	
	4/26/2000	<10	<2.03	<5.0	<5.0	---	<5.0	
	10/31/2000	120	190	<50	<50	<20	<50	No lead was detected at detection limits of 1,000 ppb.
	10/23/2001	<100	690	<25	<25	<25	<25	
	1/27/2003	<200	1,300	<1	<1	<1	24	

Table 4. Analytical Results for Ground Water - Fuel Oxygenates Lead Scavengers - Redwood Oil Bulk Plant - 455 Yolanda Avenue, Santa Rosa, California

Well ID	Sample Date	Tert-	MTBE	Diisopropyl	Ethyl-tert-butyl-	Lead	Tert-Amylmethyl	Notes
		Butanol		Ether	ether	Scavengers	ether	
MW-9	10/18/1996	---	150	---	---	---	---	---
	4/10/1997	---	2,200	---	---	---	---	---
	10/29/1997	---	4,600	---	---	---	---	---
	4/8/1998	---	450	---	---	---	---	---
	10/7/1998	ND	1,000	ND	ND	---	ND	
	4/7/1999	---	260	---	---	---	---	---
	10/19/1999	---	97	---	---	---	---	---
	4/26/2000	<10	193	<5.0	<5.0	---	<5.0	
	10/31/2000	14	22	<5.0	<5.0	<2.0	<5.0	
	10/23/2001	<100	890	<25	<25	<25	<25	
	1/27/2003	<200	440	<1	<1	<1	8	
	1/20/2004	<5	93	<1	<1	<1	4	
	1/18/2005	<5	54	<0.5	<0.5	<1	1.7	
	1/24/2006	<5	16	<0.5	<0.5	<1	<0.5	
MW-10	4/26/2000	<10,000	210,004	<5,000	<5,000	---	<5,000	
	10/31/2000	23,000	35,000	<5000	<5000	<2000	<5000	
	2/2/2001	<20,000	51,000	<5,000	<5,000	<5,000	<5,000	
	4/23/2001	5,400	27,000	<1,000	<1,000	<1,000	<1,000	
	7/23/2001	<10,000	46,000	<2,500	<2,500	<5 / <2,500	<2,500	
	10/23/2001	9,400	59,000	<1,250	<1,250	<1,250	1,400	
	1/22/2002	32,000	18,000	<1,250	<1,250	—	1,800	
	4/25/2002	<20,000	36,000	<100	<100	<100	1,200	
	7/23/2002	5,000	34,000	<1	5	<1	910	
	10/22/2002	<10,000	46,000	<5,000	<5,000	<5,000	<5,000	
	1/27/2003	3,100	23,000	<1	4	<1	720	
	4/22/2003	910	7,100	<1	<1	<1	220	
	7/22/2003	4,000	15,000	5	3	<1	490	
	1/20/2004	520	7,300	1	<1	<1	170	
	1/18/2005	900	2,200	4	<0.5	<1	100	
	1/23/2006	1,100	1,400	11	<0.5	<1	61	

Table 4. Analytical Results for Ground Water - Fuel Oxygenates Lead Scavengers - Redwood Oil Bulk Plant - 455 Yolanda Avenue, Santa Rosa, California

Well ID	Sample Date	Tert-	MTBE	Diisopropyl	Ethyl-tert-butyl-	Lead	Tert-Amylmethyl	Notes
		Butanol		Ether	ether	Scavengers	ether	
-----ppb----->								
MW-11	5/8/2000	<100	150	<50	<50	---	<50	
	10/31/2000	140	280	<50	<50	<20	<50	
	2/2/2001	<100	310	<25	<25	<25	<25	
	4/23/2001	<20	17	<5.0	<5.0	<5.0	<5.0	
	7/23/2001	<20	68	<5.0	<5.0	<5.0	<5.0	
	10/23/2001	<20	99	<5	<5	<5	<5	
	1/22/2002	110	43	<10	<10	<10	<10	
	4/25/2002	<200	38	<1	<1	<1	<1	
	7/23/2002	<200	60	<1	<1	<1	<1	
MW-12	5/8/2000	<10	3.2	<5.0	<5.0	---	<5.0	
	10/31/2000	<10	<2.0	<5.0	<5.0	<2.0	<5.0	
	2/2/2001	<20	<5.0	<5.0	<5.0	<5.0	<5.0	
	4/23/2001	<20	<5.0	<5.0	<5.0	<5.0	<5.0	
	7/23/2001	<20	<5.0	<5.0	<5.0	<5.0	<5.0	
	10/23/2001	<20	<5	<5	<5	<5	<5	
	1/22/2002	<20	<5	<5	<5	<5	<5	
	4/25/2002	<200	<1	<1	<1	<1	<1	
	7/23/2002	<200	<1	<1	<1	<1	<1	
MW-13	5/8/2000	<10	<2.0	<5.0	<5.0	---	<5.0	
	10/31/2000	<10	<2.0	<5.0	<5.0	<2.0	<5.0	
	2/2/2001	<20	<5.0	<5.0	<5.0	<5.0	<5.0	
	4/23/2001	<20	<5.0	<5.0	<5.0	<5.0	<5.0	
	7/23/2001	<20	<5.0	<5.0	<5.0	<5.0	<5.0	
	10/23/2001	<20	<5	<5	<5	<5	<5	Well has been abandoned.
MW-14	5/8/2000	<10	<2.0	<5.0	<5.0	---	<5.0	
	10/31/2000	<10	<2.0	<5.0	<5.0	<2.0	<5.0	
	2/2/2001	<20	<5.0	<5.0	<5.0	<5.0	<5.0	
	4/23/2001	<20	<5.0	<5.0	<5.0	<5.0	<5.0	
	7/23/2001	<20	<5.0	<5.0	<5.0	<5.0	<5.0	
	10/23/2001	<20	<5	<5	<5	<5	<5	Well has been abandoned.

Table 4. Analytical Results for Ground Water - Fuel Oxygenates Lead Scavengers - Redwood Oil Bulk Plant - 455 Yolanda Avenue, Santa Rosa, California

Well ID	Sample Date	Tert-	MTBE	Diisopropyl	Ethyl-tert-butyl-	Lead	Tert-Amylmethyl	Notes
		Butanol		Ether	ether	Scavengers	ether	
-----ppb----->								
MW-15	5/8/2000	<10	<2.0	<5.0	<5.0	---	<5.0	
	10/31/2000	<10	<2.0	<5.0	<5.0	<2.0	<5.0	
	10/23/2001	<20	<5	<5	<5	<5	<5	
	1/27/2003	<200	<1	<1	<1	<1	<1	
MW-16	5/8/2000	<10	<2.0	<5.0	<5.0	---	<5.0	
	10/31/2000	<10	<2.0	<5.0	<5.0	<2.0	<5.0	
	10/23/2001	<20	<5	<5	<5	<5	<5	
	1/27/2003	<200	1	<1	<1	<1	<1	
MW-17	5/8/2000	<10	<2.0	<5.0	<5.0	---	<5.0	
	10/31/2000	<10	<2.0	<5.0	<5.0	<2.0	<5.0	
	10/23/2001	<20	<5	<5	<5	<5	<5	
MW-18	5/8/2000	<10	<2.0	<5.0	<5.0	---	<5.0	
	10/31/2000	<10	<2.0	<5.0	<5.0	<2.0	<5.0	
	10/23/2001	<20	<5	<5	<5	<5	<5	
	1/27/2003	<200	<1	<1	<1	<1	<1	
MW-19	5/8/2000	<10	<2.0	<5.0	<5.0	---	<5.0	
	10/31/2000	<10	<2.0	,5.0	<5.0	<2.0	<5.0	
	10/23/2001	<20	<5	<5	<5	<5	<5	
MW-20	6/8/2000	<10	<2.0	<5.0	<5.0	---	<5.0	
	10/31/2000	<10	<2.0	<5.0	<5.0	<2.0	<5.0	
	10/23/2001	<20	<5	<5	<5	<5	<5	

Table 4. Analytical Results for Ground Water - Fuel Oxygenates Lead Scavengers - Redwood Oil Bulk Plant - 455 Yolanda Avenue, Santa Rosa, California

Well ID	Sample Date	Tert-	MTBE	Diisopropyl	Ethyl-tert-butyl-	Lead	Tert-Amylmethyl	Notes
		Butanol		Ether	ether	Scavengers	ether	
		-----ppb----->						
V-1	3/6/1996	---	<1,000	---	---	---	---	
	10/18/1996	---	<1,000	---	---	---	---	
	4/9/1997	---	1,200	---	---	---	---	
	10/29/1997	---	---	---	---	---	---	
	4/7/1998	---	1,900	---	---	---	---	
	10/7/1998	ND	<100	ND	ND		ND	
	4/7/1999	---	100	---	---		---	
	10/19/1999	---	<50	---	---		---	
	4/26/2000	<10,000	65,004	<5,000	<5,000		<5,000	
	10/31/2000	<1,000	<200	<500	<500	<200	<500	No lead was detected at detection limits of 1,000 ppb.
	2/26/2001	<100	<25	<25	<25	<25	<25	
	4/23/2001	23	15	<5.0	<5.0	<5.0	<5.0	
	7/23/2001	<40	16	<10	<10	<10	<10	
	10/23/2001	28	13	<5	<5	<5	<5	
	1/22/2002	360	<100	<100	<100	—	<100	
	1/22/2002	<400	<100	<100	<100	---	<100	Lab reissued data with corrected Tert-butanol results.
	4/25/2002	<2,000	12	<10	<10	<10	<10	
	7/23/2002	<200	10	<1	<1	<1	<1	
	1/28/2003	<200	6	<1	<1	<1	<1	
	7/22/2003	<200	7	<1	<1	<1	<1	

Table 4. Analytical Results for Ground Water - Fuel Oxygenates Lead Scavengers - Redwood Oil Bulk Plant - 455 Yolanda Avenue, Santa Rosa, California

Well ID	Sample Date	Tert-	MTBE	Diisopropyl	Ethyl-tert-butyl-	Lead	Tert-Amylmethyl	Notes
		Butanol		Ether	ether	Scavengers	ether	
V-2	3/6/1996	---	6,000	---	---	---	---	---
	10/18/1996	---	40,000	---	---	---	---	---
	4/9/1997	---	80,000	---	---	---	---	---
	10/30/1997	---	68,000	---	---	---	---	---
	4/7/1998	---	77,000	---	---	---	---	---
	10/7/1998	ND	120,000	ND	ND	ND	ND	---
	4/7/1999	---	98,000	---	---	---	---	---
	10/19/1999	---	79,000	---	---	---	---	---
	4/26/2000	57,000	940,004	<5,000	<5,000	ND	<5,000	Well no longer sampled. It has been switched to a SVE (soil vapor extraction) well.
	10/31/2000	<10	8.1	<5.0	<5.0	<2.0	<5.0	---
	2/26/2001	<20,000	130,000	<5,000	<5,000	<5,000	<5,000	---
	4/23/2001	20,000	47,000	<1,000	<1,000	<1,000	<1,000	---
	7/23/2001	—	—	—	—	—	—	Well no longer sampled. It has been switched to a SVE (soil vapor extraction) well.
DW-2	10/21/1996	---	540	---	---	---	---	---
	4/10/1997	---	560	---	---	---	---	---
	10/30/1997	---	1,500	---	---	---	---	---
	4/8/1998	---	1,300	---	---	---	---	---
	10/7/1998	ND	2,300	ND	ND	ND	ND	---
	4/7/1999	---	3,500	---	---	---	---	---
DW-468	4/2/1998	ND	<5	ND	ND	ND	ND	---
	7/31/1998	ND	<5	ND	ND	ND	ND	---
	10/7/1998	---	<0.5	---	---	---	---	---
	4/7/1999	---	<0.5	---	---	---	---	---
	10/19/1999	---	<0.5	---	---	---	---	---
	4/26/2000	<10	<2.03	<5.0	<5.0	ND	<5.0	---
	5/26/2000	<10	<2.0	<5.0	<5.0	---	<5.0	---
	6/26/2000	---	---	---	---	---	---	---
	7/21/2000	---	---	---	---	---	---	---
	8/29/2000	---	---	---	---	---	---	---
	10/2/2000	<10	<2.0	<5.0	<5.0	<2.0	<5.0	No lead was detected at detection limits of 1,000 ppb.

Table 4. Analytical Results for Ground Water - Fuel Oxygenates Lead Scavengers - Redwood Oil Bulk Plant - 455 Yolanda Avenue, Santa Rosa, California

Well ID	Sample Date	Tert-	MTBE	Diisopropyl	Ethyl-tert-butyl-	Lead	Tert-Amylmethyl	Notes
		Butanol		Ether	ether	Scavengers	ether	
-----ppb----->								
DW-468	10/31/2000	<10	<2.0	<5.0	<5.0	<2.0	<5.0	
	11/30/2000	<10	<2.0	<5.0	<5.0	<2.0	<5.0	
	12/19/2000	<10	<2.0	<5.0	<5.0	<2.0	<5.0	
	2/2/2001	<20	<5.0	<5.0	<5.0	<5.0	<5.0	
	3/23/2001	<10.0	<2.0	<5.0	<5.0	<2.0	<5.0	
	4/23/2001	<20	<5.0	<5.0	<5.0	<5.0	<5.0	
	5/14/2001	<20	<5.0	<5.0	<5.0	<5.0	<5.0	
	6/18/2001	<20	<5.0	<5.0	<5.0	<5.0	<5.0	
	7/23/2001	<20	<5.0	<5.0	<5.0	<5.0	<5.0	
	8/22/2001	<20	<5	<5	<5	<5	<5	
	9/13/2001	<20	<5	<5	<5	<5	<5	
	10/23/2001	<20	<5	<5	<5	<5	<5	
	11/20/2001	<20	<5	<5	<5	<5	<5	
	12/4/2001	<20	<5	<5	<5	<5	<5	Well has been taken out of service
DW-404	6/22/2001	<20	<5.0	<5.0	<5.0	—	<5.0	
	7/23/2001	<20	<5.0	<5.0	<5.0	<5.0	<5.0	
	8/22/2001	<20	<5	<5	<5	<5	<5	
	9/13/2001	<20	<5	<5	<5	<5	<5	
	10/23/2001	<20	<5	<5	<5	<5	<5	
	11/20/2001	<20	<5	<5	<5	<5	<5	
	12/4/2001	<20	<5	<5	<5	<5	<5	Well has been taken out of service.

Explanation:

MTBE: Methyl tertiary-butyl ether

Table 5. Analytical Results for Ground Water in Multi-Level Wells - Fuel Oxygenates and Lead Scavengers - Redwood Oil Bulk Plant - 455 Yolanda Ave, Santa Rosa, California

Well ID	Sample Date	Sample Depth (in feet)	Lead Scavengers	Diisopropyl Ether	Ethyl-tert-butyl-Ether	MTBE	tert-Amyl Methyl Ether	tert-Butanol
			<----- ppb ----->					
MW-21	2/26/01	24	<100	<100	<100	2,100	<100	810
	2/26/01	50	<50	<50	<50	710	<50	340
	2/26/01	75	<500	<500	<500	8,900	<500	<2,000
	2/26/01	110	<100	<100	<100	1,400	<100	650
	2/26/01	143	<50	<50	<50	900	<50	420
	2/26/01	158	<25	<25	<25	580	<25	270
	2/26/01	165.5	<100	<100	<100	1,100	<100	<400
	4/26/01	24	---	<500	<500	9,400	<500	7,500
	4/26/01	50	---	<50	<50	1,000	<50	430
	4/26/01	75	---	<1,000	<1,000	17,000	<1,000	<4,000
	4/26/01	110	---	<25	<25	660	<25	200
	4/26/01	143	---	<50	<50	1,100	<50	320
	4/26/01	158	---	<25	<25	400	<25	<100
	4/26/01	165.5	---	<100	<100	2,300	<100	480
	7/25/01	24	<250	<250	<250	6,300	<250	4,600
	7/25/01	75	<500	<500	<500	18,000	<500	2,800
	7/25/01	143	<25	<25	<25	990	<25	250
	7/25/01	165.5	<100	<100	<100	2,100	<100	460
	10/25/01	24	<25	<25	<25	310	<25	1,200
	10/25/01	75	<500	<500	<500	16,000	<500	23,000
	10/25/01	143	<50	<50	<50	790	<50	1,200
	10/25/01	165.5	<100	<100	<100	2,000	<100	3,100

Table 5. Analytical Results for Ground Water in Multi-Level Wells - Fuel Oxygenates and Lead Scavengers - Redwood Oil Bulk Plant - 455 Yolanda Ave, Santa Rosa, California

Well ID	Sample Date	Sample Depth (in feet)	Lead Scavengers	Diisopropyl Ether	Ethyl-tert-butyl-Ether	MTBE	tert-Amyl Methyl Ether	tert-Butanol
			<----- ppb ----->					
MW-21 cont	1/24/02	24	<5	<5	<5	170	<5	51
	1/24/02	75	<1,000	<1,000	<1,000	18,000	<1,000	<4,000
	1/24/02	143	<25	<25	<25	860	<25	480
	1/24/02	165.5	<100	<100	<100	1,800	<100	<400
	5/1/02	24	<1	<1	<1	56	2	<200
	5/1/02	75	<100	<100	<100	23,000	330	<20,000
	5/1/02	143	<10	<10	<10	960	12	<2,000
	5/1/02	165.5	<10	<10	<10	1,500	22	<2,000
	7/25/02	24	<1	<1	<1	4	<1	<200
	7/25/02	75	<1	<1	<1	20,000	270	1,400
	7/25/02	143	<1	<1	<1	880	10	<200
	7/25/02	165.5	<1	<1	<1	1,300	18	220
	10/24/02	24	<10	<10	<10	70	<10	<20
	10/24/02	75	<1,250	<1,250	<1,250	23,000	<1,250	2,800
	10/24/02	143	<50	<50	<50	760	<50	120
	10/24/02	165.5	<125	<125	<125	1,400	<125	<250
	1/31/03	24	<1	<1	<1	47	<1	<200
	1/31/03	75	<1	<1	1	28,000	320	2,400
	1/31/03	143	<1	<1	<1	1,100	14	<200
	1/31/03	165.5	<1	<1	<1	1,700	26	<200
	4/23/03	24	<1	<1	<1	460	8	<200
	4/23/03	75	<1	<1	1	27,000	300	3,300
	4/23/03	143	<1	<1	<1	720	11	<200

Table 5. Analytical Results for Ground Water in Multi-Level Wells - Fuel Oxygenates and Lead Scavengers - Redwood Oil Bulk Plant - 455 Yolanda Ave, Santa Rosa, California

Well ID	Sample Date	Sample Depth (in feet)	Lead Scavengers	Diisopropyl Ether	Ethyl-tert-butyl-Ether	MTBE	tert-Amyl Methyl Ether	tert-Butanol
			<----- ppb ----->					
MW-21 cont.	4/23/03	165.5	<1	<1	<1	900	14	<200
	7/25/03	24	<1	<1	<1	64	<1	<200
	7/25/03	75	<1	<1	1	25,000	310	5,600
	7/25/03	143	<1	<1	<1	880	12	200
	7/25/03	165.5	<1	<1	<1	910	13	<200
	1/22/04	24	<1	<1	<1	95	2	5
	1/22/04	75	<1	<1	2	28,000	420	4,200
	1/22/04	143	<1	<1	<1	720	12	100
	1/22/04	165.5	<1	<1	<1	870	14	110
	7/19/04	24	<0.5	<0.5	<0.5	200	5.4	38
	7/19/04	75	<5	<5	<5	22,000	350	3,800
	7/19/04	143	<0.5	<0.5	<0.5	980	17	120
	7/19/04	165.5	<0.5	<0.5	<0.5	960	14	130
	1/20/05	24	<1	<0.5	<0.5	920	20	94
	1/20/05	75	<1	0.6	1.2	23,000	300	3,300
	1/20/05	143	<1	<0.5	<0.5	970	15	66
	1/20/05	165.5	<1	<0.5	<0.5	920	16	130
	7/12/05	24	<1	<0.5	<0.5	7.8	<0.5	<5
	7/12/05	75	<1	0.7	1.4	41,000	450	4,900
	7/12/05	143	<1	<0.5	<0.5	270	3.7	69
	7/12/05	165.5	<1	<0.5	<0.5	400	5.4	88
	1/23/06	24	<1	<0.5	<0.5	130	2.7	<5
	1/23/06	75	<1	<0.5	0.7	12,000	100	890

Table 5. Analytical Results for Ground Water in Multi-Level Wells - Fuel Oxygenates and Lead Scavengers - Redwood Oil Bulk Plant - 455 Yolanda Ave, Santa Rosa, California

Well ID	Sample Date	Sample Depth (in feet)	Lead Scavengers	Diisopropyl Ether	Ethyl-tert-butyl-Ether	MTBE	tert-Amyl Methyl Ether	tert-Butanol
			<----- ppb ----->					
MW-21 cont.	1/23/06	143	<1	<0.5	<0.5	400	8.7	32
	1/23/06	165.5	<1	<0.5	<0.5	550	6.8	30
<hr/>								
MW-22	2/26/01	22	<100	<100	<100	2,000	<100	830
	2/26/01	47	<25	<25	<25	380	<25	110
	2/26/01	72.5	<25	<25	<25	480	<25	140
	2/26/01	113	<100	<100	<100	2,000	<100	600
	2/26/01	144	<25	<25	<25	720	<25	230
	2/26/01	164.5	<25	<25	<25	630	<25	200
	2/26/01	177.5	<5.0	<5.0	<5.0	59	<5.0	75
	4/27/01	22	---	<2,500	<2,500	86,000	<2,500	18,000
	4/27/01	47	---	<25	<25	1,500	<25	510
	4/27/01	72.5	---	<5.0	<5.0	9.5	<5.0	<20.0
	4/27/01	113	---	<10.0	<10.0	390	11	160
	4/27/01	144	---	<5.0	<5.0	6.2	<5.0	<20.0
	4/27/01	164.5	---	<5.0	<5.0	31	<5.0	36
	4/27/01 ¹	177.5	---	---	---	----	---	---
	7/25/01	22	<2,500	<2,500	<2,500	92,000	<2,500	16,000
	7/25/01	72.5	<5.0	<5.0	<5.0	160	7.0	<20
	7/25/01	144	<5.0	<5.0	<5.0	71	<5.0	40
	7/25/01	164.5	<5.0	<5.0	<5.0	95	<5.0	53
	10/25/01 ²	22	—	—	—	—	—	---
	10/25/01	72.5	<5	<5	<5	31	<5	<20

Table 5. Analytical Results for Ground Water in Multi-Level Wells - Fuel Oxygenates and Lead Scavengers - Redwood Oil Bulk Plant - 455 Yolanda Ave, Santa Rosa, California

Well ID	Sample Date	Sample Depth (in feet)	Lead Scavengers	Diisopropyl Ether	Ethyl-tert-butyl-Ether	MTBE	tert-Amyl Methyl Ether	tert-Butanol
			<----- ppb ----->					
MW-22 cont	10/25/01	144	<5	<5	<5	45	<5	110
	10/25/01	164.5	<5	<5	<5	28	<5	75
	1/24/02	22	<10,000	<10,000	<10,000	100,000	<10,000	<40,000
	1/24/02	72.5	<5	<5	<5	200	5.2	34
	1/24/02	144	<5	<5	<5	150	<5	75
	1/24/02	177.5	<5	<5	<5	160	<5	75
	5/1/02	22	<1,000	<1,000	<1,000	100,000	2,000	<200,000
	5/1/02	72.5	<1	<1	<1	200	8	<200
	5/1/02	144	<1	<1	<1	52	3	<200
	5/1/02	177.5	<1	<1	<1	39	2	<200
	7/25/02	22	2	<1	5	120,000	2,300	6,000
	7/25/02	72.5	<1	<1	<1	290	8	<200
	7/25/02	144	<1	<1	<1	30	1	<200
	7/25/02	177.5	<1	<1	<1	21	<1	<200
	10/24/02 ²	22	---	---	---	---	---	---
	10/24/02	72.5	<25	<25	<25	210	<25	<50
	10/24/02	144	<5	<5	<5	6.2	<5	<10
	10/24/02	177.5	<5	<5	<5	3.1	<5	<10
	1/31/03	22	<1	<1	4	85,000	1,600	5,000
	1/31/03	72.5	<1	<1	<1	2,500	65	<200
	1/31/03	144	<1	<1	<1	1,400	31	<200
	1/31/03	177.5	<1	<1	<1	220	5	<200
	4/23/03	22	<1	<1	3	50,000	1,000	9,100

Table 5. Analytical Results for Ground Water in Multi-Level Wells - Fuel Oxygenates and Lead Scavengers - Redwood Oil Bulk Plant - 455 Yolanda Ave, Santa Rosa, California

Well ID	Sample Date	Sample Depth (in feet)	Lead Scavengers	Diisopropyl Ether	Ethyl-tert-butyl-Ether	MTBE	tert-Amyl Methyl Ether	tert-Butanol
			<----- ppb ----->					
MW-22 cont.	4/23/03	72.5	<1	<1	<1	280	11	<200
	4/23/03	144	<1	<1	<1	140	6	<200
	4/23/03	177.5	<1	<1	<1	280	9	<200
	7/24/03	22	<1	<1	3	83,000	1,700	17,000
	7/24/03	72.5	<1	<1	<1	67	3	<200
	7/24/03	144	<1	<1	<1	49	2	<200
	7/24/03	177.5	<1	<1	<1	52	2	<200
	1/22/04	22	2	<1	3	81,000	1,400	9,100
	1/22/04	72.5	<1	<1	<1	120	5	<5
	1/22/04	144	<1	<1	<1	50	2	<5
	1/22/04	177.5	<1	<1	<1	42	2	<5
	7/19/04	22	<5	<5	<5	49,000	1,700	6,500
	7/19/04	72.5	<0.5	<0.5	<0.5	470	19	<5
	7/19/04	144	<0.5	<0.5	<0.5	31	1.6	<5
	7/19/04	177.5	<0.5	<0.5	<0.5	45	2.2	<5
1/20/05	22	2.1	<0.5	1.6	51,000	1,200	6,600	
	72.5	<1	<0.5	<0.5	480	16	26	
	144	<1	<0.5	<0.5	140	5.5	<5	
	177.5	<1	<0.5	<0.5	59	2.9	<5	
	7/13/05	22	<1	<0.5	0.8	26,000	480	3,100
	72.5	<1	<0.5	<0.5	2.9	<0.5	<5	
	144	<1	<0.5	<0.5	4.0	<0.5	<5	

Table 5. Analytical Results for Ground Water in Multi-Level Wells - Fuel Oxygenates and Lead Scavengers - Redwood Oil Bulk Plant - 455 Yolanda Ave, Santa Rosa, California

Well ID	Sample Date	Sample Depth (in feet)	Lead Scavengers	Diisopropyl Ether	Ethyl-tert-butyl-Ether	MTBE	tert-Amyl Methyl Ether	tert-Butanol
			<----- ppb ----->					
MW-22 cont.	7/13/05	177.5	<1	<0.5	<0.5	77	0.8	<5
	1/24/06	22	0.5	<0.5	<0.5	11,000	170	160
	1/24/06	72.5	<1	<0.5	<0.5	75	4.5	<5
	1/24/06	144	<1	<0.5	<0.5	13	0.9	<5
	1/24/06	177.5	<1	<0.5	<0.5	16	1.0	<5
MW-23	2/26/01	25	<100	<100	<100	2,100	<100	1,100
	2/26/01	50	<5.0	<5.0	<5.0	150	<5.0	100
	2/26/01	75	<5.0	<5.0	<5.0	92	<5.0	60
	2/26/01	120.5	<10	<10	<10	210	<10	140
	2/26/01	148.5	<5.0	<5.0	<5.0	120	<5.0	81
	2/26/01	163.5	<5.0	<5.0	<5.0	13	<5.0	21
	2/26/01	180	<5.0	<5.0	<5.0	<5.0	<5.0	<20
	4/30/01	25	---	<250	<250	6,300	<250	1,200
	4/30/01	50	---	<5.0	<5.0	49	<5.0	<20
	4/30/01	75	---	<5.0	<5.0	19	<5.0	<20
	4/30/01	120.5	---	<5.0	<5.0	6.4	<5.0	<20
	4/30/01	148.5	---	<5.0	<5.0	22	<5.0	70
	4/30/01	163.5	---	<5.0	<5.0	<5.0	<5.0	<20
	4/30/01	180	---	<5.0	<5.0	48	<5.0	<20
	7/25/01 ³	25	---	—	—	—	—	---
	7/25/01	75	<5.0	<5.0	<5.0	42	<5.0	<20
	7/25/01	148.5	<5.0	<5.0	<5.0	71	<5.0	63

Table 5. Analytical Results for Ground Water in Multi-Level Wells - Fuel Oxygenates and Lead Scavengers - Redwood Oil Bulk Plant - 455 Yolanda Ave, Santa Rosa, California

Well ID	Sample Date	Sample Depth (in feet)	Lead Scavengers	Diisopropyl Ether	Ethyl-tert-butyl-Ether	MTBE	tert-Amyl Methyl Ether	tert-Butanol
			<----- ppb ----->					
MW-23 cont	7/25/01	180	<5.0	<5.0	<5.0	13	<5.0	31
	10/25/01 ²	25	—	—	—	—	—	---
	10/25/01	75	<5	<5	<5	21	<5	74
	10/25/01	148.5	<5	<5	<5	6.5	<5	58
	10/25/01	180	<5	<5	<5	<5	<5	39
	1/24/02	25	<250	<250	<250	4,800	<250	<1,000
	1/24/02	75	<5	<5	<5	19	<5	<20
	1/24/02	148.5	<10	<10	<10	92	<10	150
	1/24/02	180	<5	<5	<5	6.3	<5	<20
	5/1/02	25	<10	<10	<10	980	25	<2,000
	5/1/02	75	<1	<1	<1	7	<1	<200
	5/1/02	148.5	<1	<1	<1	17	<1	<200
	5/1/02	180	<1	<1	<1	<1	<1	<200
	7/24/02	25	<1	<1	<1	580	16	<200
	7/24/02	75	<1	<1	<1	13	<1	<200
	7/24/02	148.5	<1	<1	<1	11	<1	<200
	7/24/02	180	<1	<1	<1	<1	<1	<200
	10/24/02 ²	25	---	---	---	---	---	---
	10/24/02	75	<5	<5	<5	21	<5	<10
	10/24/02	148.5	<5	<5	<5	7.9	<5	16
	10/24/02	180	<5	<5	<5	<1	<5	<10
	1/31/03	25	<1	<1	<1	530	14	<200
	1/31/03	75	<1	<1	<1	58	2	<200

Table 5. Analytical Results for Ground Water in Multi-Level Wells - Fuel Oxygenates and Lead Scavengers - Redwood Oil Bulk Plant - 455 Yolanda Ave, Santa Rosa, California

Well ID	Sample Date	Sample Depth (in feet)	Lead Scavengers	Diisopropyl Ether	Ethyl-tert-butyl-Ether	MTBE	tert-Amyl Methyl Ether	tert-Butanol
			<----- ppb ----->					
MW-23 cont.	1/31/03	148.5	<1	<1	<1	27	1	<200
	1/31/03	180	<1	<1	<1	4	<1	<200
	4/23/03	25	<1	<1	<1	570	14	<200
	4/23/03	75	<1	<1	<1	28	<1	<200
	4/23/03	148.5	<1	<1	<1	5	<1	<200
	4/23/03	180	<1	<1	<1	<1	<1	<200
	7/24/03	25	<1	<1	<1	200	5	<200
	7/24/03	75	<1	<1	<1	49	<1	<200
	7/24/03	148.5	<1	<1	<1	4	<1	<200
	7/24/03	180	<1	<1	<1	<1	<1	<200
	1/22/04	25	<1	<1	<1	230	5	19
	1/22/04	75	<1	<1	<1	62	<1	<5
	1/22/04	148.5	<1	<1	<1	3	<1	7
	1/22/04	180	<1	<1	<1	<1	<1	8
	7/19/04	25	<0.5	<0.5	<0.5	180	4.8	18
	7/19/04	75	<0.5	<0.5	<0.5	48	0.7	6
	7/19/04	148.5	<0.5	<0.5	<0.5	2.4	<0.5	6
	7/19/04	180	<1	<0.5	<0.5	0.9	<0.5	6
	1/20/05	25	<1	<0.5	<0.5	53	1.4	7
	1/20/05	75	<1	<0.5	<0.5	53	0.7	7
	1/20/05	148.5	<1	<0.5	<0.5	3.2	<0.5	7
	1/20/05	180	<1	<0.5	<0.5	1.2	<0.5	5
	7/13/05	25	<1	<0.5	<0.5	74	1.4	7.3
	7/13/05	75	<1	<0.5	<0.5	1.6	<0.5	<5

Table 5. Analytical Results for Ground Water in Multi-Level Wells - Fuel Oxygenates and Lead Scavengers - Redwood Oil Bulk Plant - 455 Yolanda Ave, Santa Rosa, California

Well ID	Sample Date	Sample Depth (in feet)	Lead Scavengers	Diisopropyl Ether	Ethyl-tert-butyl-Ether	MTBE	tert-Amyl Methyl Ether	tert-Butanol
			<----- ppb ----->					
MW-23 cont.	7/13/05	148.5	<1	<0.5	<0.5	1.6	<0.5	<5
	7/13/05	180	<1	<0.5	<0.5	<0.5	<0.5	<5
	1/24/06	25	<1	<0.5	<0.5	26	1.0	<5
	1/24/06	75	<1	<0.5	<0.5	60	1.0	<5
	1/24/06	148.5	<1	<0.5	<0.5	3.8	<0.5	<5
	1/24/06	180	<1	<0.5	<0.5	1.3	<0.5	<5
MW-24	2/26/01	23	<5.0	<5.0	<5.0	8.4	<5.0	<20
	2/26/01	48	<5.0	<5.0	<5.0	5.3	<5.0	<20
	2/26/01	73	<5.0	<5.0	<5.0	8.3	<5.0	<20
	2/26/01	113	<5.0	<5.0	<5.0	<5.0	<5.0	<20
	2/26/01	146	<5.0	<5.0	<5.0	<5.0	<5.0	<20
	2/26/01	161	<5.0	<5.0	<5.0	<5.0	<5.0	<20
	2/26/01	178	<5.0	<5.0	<5.0	<5.0	<5.0	<20
	5/1/01	23	---	<5.0	<5.0	8.2	<5.0	31.0
	5/1/01	48	---	<5.0	<5.0	<5.0	<5.0	<20.0
	5/1/01	73	---	<5.0	<5.0	<5.0	<5.0	<20.0
	5/1/01	113	---	<5.0	<5.0	<5.0	<5.0	<20.0
	5/1/01	146	---	<5.0	<5.0	<5.0	<5.0	69.0
	5/1/01	161	---	<5.0	<5.0	<5.0	<5.0	50.0
	5/1/01	178	---	<5.0	<5.0	<5.0	<5.0	22.0
	7/25/01	23	<5.0	<5.0	<5.0	58	<5.0	22
	7/25/01	73	<5.0	<5.0	<5.0	6.6	<5.0	<20

Table 5. Analytical Results for Ground Water in Multi-Level Wells - Fuel Oxygenates and Lead Scavengers - Redwood Oil Bulk Plant - 455 Yolanda Ave, Santa Rosa, California

Well ID	Sample Date	Sample Depth (in feet)	Lead Scavengers	Diisopropyl Ether	Ethyl-tert-butyl-Ether	MTBE	tert-Amyl Methyl Ether	tert-Butanol
			<----- ppb ----->					
MW-24 cont.	7/25/01	146	<5.0	<5.0	<5.0	18	<5.0	69
	7/25/01	178	<5.0	<5.0	<5.0	8.0	<5.0	52
	10/25/01 ²	23	—	—	—	—	—	---
	10/25/01	73	<5	<5	<5	<5	<5	<20
	10/25/01	146	<5	<5	<5	<5	<5	50
	10/25/01	178	<5	<5	<5	<5	<5	40
	1/25/02	23	<1.5	<2.5	<2.5	82	<0.5	<55
	1/25/02	73	<0.3	<0.5	<0.5	<0.3	<0.1	<11
	1/25/02	146	<0.3	<0.5	<0.5	8.2	<0.1	30
	1/25/02	178	<0.3	<0.5	<0.5	<0.3	<0.1	<11
	4/29/02	23	<1	<1	<1	4	<1	<200
	4/29/02	73	<1	<1	<1	<1	<1	<200
	4/29/02	146	<1	<1	<1	<1	<1	<200
	4/29/02	178	<1	<1	<1	<1	<1	<200
	7/24/02	23	<1	<1	<1	5	<1	<200
	7/24/02	73	<1	<1	<1	<1	<1	<200
	7/24/02	146	<1	<1	<1	<1	<1	<200
	7/24/02	178	<1	<1	<1	<1	<1	<200
	10/23/02	23	<5	<5	<5	6.0	<5	<10
	10/23/02	73	<5	<5	<5	<1	<5	<10
	10/23/02	146	<5	<5	<5	13	<5	<10
	10/23/02	178	<5	<5	<5	<1	<5	<10
1/25/06		23	<1	<0.5	<0.5	93	1.4	<5
1/25/06		73	<1	<0.5	<0.5	1.4	<0.5	<5

Table 5. Analytical Results for Ground Water in Multi-Level Wells - Fuel Oxygenates and Lead Scavengers - Redwood Oil Bulk Plant - 455 Yolanda Ave, Santa Rosa, California

Well ID	Sample Date	Sample Depth (in feet)	Lead Scavengers	Diisopropyl Ether	Ethyl-tert-butyl-Ether	MTBE	tert-Amyl Methyl Ether	tert-Butanol
			<----- ppb ----->					
MW-24 cont.	1/25/06	146	<1	<0.5	<0.5	1.2	<0.5	5.2
	1/25/06	178	<1	<0.5	<0.5	<0.5	<0.5	<5
MW-25	1/28/02	25	<1.5	<2.5	<2.5	<1.5	<0.5	<55
	1/28/02	75	<6	<10	<10	<6	<2	<220
	1/28/02	145	<6	<10	<10	<6	<2	<220
	1/28/02	180	<0.3	<0.5	<0.5	<0.3	<0.1	<11
	1/28/02	230	<6	<10	<10	<6	<2	<220
	4/30/02	25	<1	<1	<1	<1	<1	<200
	4/30/02	75	<1	<1	<1	<1	<1	<200
	4/30/02	145	<1	<1	<1	<1	<1	<200
	4/30/02	180	<1	<1	<1	<1	<1	<200
	4/30/02	230	<1	<1	<1	<1	<1	<200
	7/26/02	25	<1	<1	<1	2	<1	<200
	7/26/02	75	<1	<1	<1	<1	<1	<200
	7/26/02	145	<1	<1	<1	<1	<1	<200
	7/26/02	180	<1	<1	<1	<1	<1	<200
	7/26/02	230	<1	<1	<1	<1	<1	<200
1/25/06	25	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<5
	75	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<5
	145	<1	0.6	<0.5	<0.5	<0.5	<0.5	11
	180	<1	0.6 ³	<0.5	<0.5	<0.5	<0.5	<5
	230	<1	0.6	<0.5	<0.5	<0.5	<0.5	5.2

Table 5. Analytical Results for Ground Water in Multi-Level Wells - Fuel Oxygenates and Lead Scavengers - Redwood Oil Bulk Plant - 455 Yolanda Ave, Santa Rosa, California

Well ID	Sample Date	Sample Depth (in feet)	Lead Scavengers	Diisopropyl Ether	Ethyl-tert-butyl-Ether	MTBE	tert-Amyl Methyl Ether	tert-Butanol
			<----- ppb ----->					
MW-26	1/25/02	25	<60	<100	<100	<60	<20	<2,200
	1/25/02	75	<0.3	<0.5	<0.5	<0.3	<0.1	<11
	1/25/02	145	<0.3	<0.5	<0.5	<0.3	<0.1	<11
	1/25/02	180	<0.3	<0.5	<0.5	<0.3	<0.1	<11
	5/2/02	25	<1	<1	<1	4	<1	<200
	5/2/02	75	<1	<1	<1	<1	<1	<200
	5/2/02	145	<1	<1	<1	1	<1	<200
	5/2/02	180	<1	<1	<1	1	<1	<200
	7/26/02 ²	25	—	----	----	—	—	—
	7/26/02	75	<1	<1	<1	<1	<1	<200
	7/26/02	145	<1	<1	<1	<1	<1	<200
	7/26/02	180	<1	<1	<1	<1	<1	<200
	4/23/03	25	<1	<1	<1	<1	<1	<200
	4/23/03	75	<1	<1	<1	<1	<1	<200
	4/23/03	145	<1	<1	<1	<1	<1	<200
	4/23/03	180	<1	<1	<1	<1	<1	<200
	1/21/04	25	<1	<1	<1	<1	<1	<5
	1/21/04	75	<1	<1	<1	<1	<1	11
	1/20/05	25	<1	<0.5	<0.5	<0.5	<0.5	<5
	1/20/05	75	<1	<0.5	<0.5	<0.5	<0.5	8
	2/1/06	25	<1	<0.5	<0.5	<0.5	<0.5	<5
	2/1/06	75	<1	<0.5	<0.5	<0.5	<0.5	23
	2/1/06	145	<1	<0.5	<0.5	<0.5	<0.5	23
	2/1/06	180	<1	<0.5	<0.5	<0.5	<0.5	24

Table 5. Analytical Results for Ground Water in Multi-Level Wells - Fuel Oxygenates and Lead Scavengers - Redwood Oil Bulk Plant - 455 Yolanda Ave, Santa Rosa, California

Well ID	Sample Date	Sample Depth (in feet)	Lead Scavengers	Diisopropyl Ether	Ethyl-tert-butyl-Ether	MTBE	tert-Amyl Methyl Ether	tert-Butanol
			<----- ppb ----->					
MW-27	1/28/02	25	<6	<10	<10	<6	<2	<220
	1/28/02	75	<1.5	<2.5	<2.5	2.3	<0.5	<55
	1/28/02	145	<6	<10	<10	<6	<2	<220
	1/28/02	180	<1.5	<2.5	<2.5	<1.5	<0.5	<55
	1/28/02	230	<0.6	<1	<1	1.5	<0.2	<22
	4/30/02	25	<1	<1	<1	<1	<1	<200
	4/30/02	75	<1	<1	<1	<1	<1	<200
	4/30/02	145	<1	<1	<1	<1	<1	<200
	4/30/02	180	<1	<1	<1	<1	<1	<200
	4/30/02	230	<1	<1	<1	<1	<1	<200
	7/26/02	25	<1	<1	<1	6	<1	<200
	7/26/02	75	<1	<1	<1	10	<1	<200
	7/26/02	145	<1	<1	<1	<1	<1	<200
	7/26/02	180	<1	<1	<1	<1	<1	<200
	7/26/02	230	<1	<1	<1	6	<1	<200
	10/23/02	25	<5	<5	<5	<1	<5	<10
	10/23/02	75	<500	<500	<500	<100	<500	<1,000
	10/23/02	145	<5	<5	<5	<1	<5	<10
	10/23/02	180	<5	<5	<5	<1	<5	<10
	10/23/02	230	<5	<5	<5	<1	<5	26
2/1/06	25	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<5
	75	<1	<0.5	<0.5	<0.5	<0.5	<0.5	26
	145	<1	0.6	<0.5	<0.5	<0.5	<0.5	<5
	180	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<5

Table 5. Analytical Results for Ground Water in Multi-Level Wells - Fuel Oxygenates and Lead Scavengers - Redwood Oil Bulk Plant - 455 Yolanda Ave, Santa Rosa, California

Well ID	Sample Date	Sample Depth (in feet)	Lead Scavengers	Diisopropyl Ether	Ethyl-tert-butyl-Ether	MTBE	tert-Amyl Methyl Ether	tert-Butanol
			<----- ppb ----->					
MW-27 cont.	2/1/06	230	<1	<0.5	<0.5	<0.5	<0.5	<5
<hr/>								
MW-28	1/25/02	25	<30	<50	<50	35	<10	<1,100
	1/25/02	75	<0.3	<0.5	<0.5	<0.3	<0.1	<11
	1/25/02	145	<0.3	<0.5	<0.5	<0.3	<0.1	<11
	1/25/02	180	<0.6	<1	<1	0.6	<0.2	<22
	5/2/02	25	<1	<1	<1	4	<1	<200
	5/2/02	75	<1	<1	<1	2	<1	<200
	5/2/02	145	<1	<1	<1	2	<1	<200
	5/2/02	180	<1	<1	<1	<1	<1	<200
	7/26/02 ²	25	—	—	—	—	—	---
	7/26/02	75	<1	<1	<1	<1	<1	<200
	7/26/02	145	<1	<1	<1	<1	<1	<200
	7/26/02	180	<1	<1	<1	<1	<1	<200
	1/31/03	25	<1	<1	<1	12	<1	<200
	1/31/03	75	<1	<1	<1	4	<1	<200
	1/31/03	145	<1	<1	<1	2	<1	<200
	1/31/03	180	<1	<1	<1	1	<1	<200
	7/23/03	25	<1	<1	<1	<1	<1	<200
	7/23/03	75	<1	<1	<1	<1	<1	<200
	7/23/03	145	<1	<1	<1	<1	<1	<200
	7/23/03	180	<1	<1	<1	<1	<1	<200
	1/21/04	25	<1	<1	<1	<1	<1	6
	1/21/04	75	<1	<1	<1	<1	<1	8

Table 5. Analytical Results for Ground Water in Multi-Level Wells - Fuel Oxygenates and Lead Scavengers - Redwood Oil Bulk Plant - 455 Yolanda Ave, Santa Rosa, California

Well ID	Sample Date	Sample Depth (in feet)	Lead Scavengers	Diisopropyl Ether	Ethyl-tert-butyl-Ether	MTBE	tert-Amyl Methyl Ether	tert-Butanol
			<----- ppb ----->					
MW-28 cont.	1/19/05	25	<1	<0.5	<0.5	<0.5	<0.5	<5
	1/19/05	75	<1	<0.5	<0.5	<0.5	<0.5	6
	1/27/06	25	<1	<0.5	<0.5	<0.5	<0.5	<5
	1/27/06	75	<1	<0.5	<0.5	<0.5	<0.5	<5
	1/27/06	145	<1	<0.5	<0.5	<0.5	<0.5	<5
	1/27/06	180	<1	<0.5	<0.5	<0.5	<0.5	9.5
MW-29	1/25/02	25	<6	<10	<10	13	<2	<220
	1/25/02	75	<6	<10	<10	6.0	<2	<220
	1/25/02	145	<6	<10	<10	<6	<2	<220
	1/25/02	180	<6	<10	<10	<6	<2	<220
	5/1/02	25	<1	<1	<1	<1	<1	<200
	5/1/02	75	<1	<1	<1	<1	<1	<200
	5/1/02	145	<1	<1	<1	<1	<1	<200
	5/1/02	180	<1	<1	<1	<1	<1	<200
	7/24/02	25	<1	<1	<1	3	<1	<200
	7/24/02	75	<1	<1	<1	<1	<1	<200
	7/24/02	145	<1	<1	<1	<1	<1	<200
	7/24/02	180	<1	<1	<1	<1	<1	<200
	1/31/03	25	<1	<1	<1	50	2	<200
	1/31/03	75	<1	<1	<1	16	<1	<200
	1/31/03	145	---	---	---	---	---	---
	1/31/03	180	---	---	---	---	---	---
	1/21/04	25	<1	<1	<1	2	<1	9

Table 5. Analytical Results for Ground Water in Multi-Level Wells - Fuel Oxygenates and Lead Scavengers - Redwood Oil Bulk Plant - 455 Yolanda Ave, Santa Rosa, California

Well ID	Sample Date	Sample Depth (in feet)	Lead Scavengers	Diisopropyl Ether	Ethyl-tert-butyl-Ether	MTBE	tert-Amyl Methyl Ether	tert-Butanol
			<----- ppb ----->					
MW-29 cont.	1/21/04	75	<1	<1	<1	<1	<1	24
	1/19/05	25	<1	<0.5	<0.5	0.6	<0.5	6
	1/19/05	75	<1	<0.5	<0.5	<0.5	<0.5	12
	1/27/06	25	<1	<0.5	<0.5	<0.5	<0.5	11
	1/27/06	75	<1	<0.5	<0.5	<0.5	<0.5	5.3
	1/27/06	145	<1	<0.5	<0.5	<0.5	<0.5	<5
	1/27/06	180	<1	<0.5	<0.5	<0.5	<0.5	<5
MW-30	1/28/02	25	<3	<5	<5	170	<1	<110
	1/28/02	75	<6	<10	<10	12	<2	<220
	1/28/02	145	<1.5	<2.5	<2.5	1.6	<0.5	<55
	1/28/02	180	<3	<5	<5	<3	<1	<110
	1/28/02	230	<1.5	<2.5	<2.5	<1.5	<0.5	<55
	4/29/02	25	<1	<1	<1	130	<1	<200
	4/29/02	75	<1	<1	<1	2	<1	<200
	4/29/02	145	<1	<1	<1	<1	<1	<200
	4/29/02	180	<1	<1	<1	<1	<1	<200
	4/29/02	230	<1	<1	<1	<1	<1	<200
	7/24/02	25	<1	<1	<1	150	<1	<200
	7/24/02	75	<1	1	<1	1	<1	<200
	7/24/02	145	<1	<1	<1	<1	<1	<200
	7/24/02	180	<1	<1	<1	<1	<1	<200
	7/24/02	230	<1	<1	<1	<1	<1	<200
	1/31/03	25	<1	<1	<1	220	2	<200

Table 5. Analytical Results for Ground Water in Multi-Level Wells - Fuel Oxygenates and Lead Scavengers - Redwood Oil Bulk Plant - 455 Yolanda Ave, Santa Rosa, California

Well ID	Sample Date	Sample Depth (in feet)	Lead Scavengers	Diisopropyl Ether	Ethyl-tert-butyl-Ether	MTBE	tert-Amyl Methyl Ether	tert-Butanol
			<----- ppb ----->					
MW-30 cont.	1/31/03	75	<1	2	<1	8	<1	<200
	1/31/03	145	<1	1	<1	21	1	<200
	1/31/03	180	<1	<1	<1	6	<1	<200
	1/31/03	230	<1	<1	<1	7	<1	<200
	7/23/03 ²	25	---	---	---	---	---	---
	7/23/03	75	<1	1	<1	3	<1	<200
	7/23/03	145	<1	<1	<1	1	<1	<200
	7/23/03	180	<1	<1	<1	<1	<1	<200
	7/23/03	230	<1	<1	<1	<1	<1	<200
	1/21/04	25	<1	<1	<1	200	1	<5
	1/21/04	75	<1	2	<1	4	<1	<5
	1/19/05	25	<1	<0.5	<0.5	170	1.1	<5
	1/19/05	75	0.7	2.2	<0.5	6.0	<0.5	<5
	1/25/06	25	<1	<0.5	<0.5	110	0.9	<5
	1/25/06	75	0.8	1.7	<0.5	5.2	<0.5	<5
	1/25/06	145	0.5	0.9	<0.5	2.8	<0.5	5.7
	1/25/06	180	<1	0.7	<0.5	1.9	<0.5	5.7
	1/25/06	230	<1	0.8	<0.5	2.0	<0.5	8.4

Explanation:

MTBE = Methyl tertiary-butyl ether
ppb = parts per billion

Notes:

¹ Port was inaccessible.

² Port was dry, therefore not sampled.

Table 5. Analytical Results for Ground Water in Multi-Level Wells - Fuel Oxygenates and Lead Scavengers - Redwood Oil Bulk Plant - 455 Yolanda Ave, Santa Rosa, California

³The result for the surrogate associated with this analyte was out of control limits. The reported concentration is an estimate.

ECMQMs\507\50714TGW.T5mlw

Table 6. Analytical Results for Ground Water in Multi-Level Wells - Organic Compounds - Redwood Oil Bulk Plant - 455 Yolanda Ave, Santa Rosa, California

Sample ID	Sample Date	Sample Depth (in feet)	TPPH(G)	TPH(D)	Motor Oil	Benzene	Toluene	Ethylbenzene	Xylenes
			< -----	ppb	----- >				
MW-21	10/24/02	24	130	220	320	3.0	0.65	<0.5	10
	10/24/02	75	13,000	620	720	<100	<100	<100	<200
	10/24/02	143	750	210	<250	36	15	7.6	31
	10/24/02	165.5	1,100	200	<250	17	9.2	<5	17
	1/31/03	24	54	410	<250	13	2	1	10
	1/31/03	75	790	780	430	180	69	44	175
	1/31/03	143	730	210	<250	210	74	46	184
	1/31/03	165.5	310	230	<250	77	34	19	71
	4/23/03	24	92	370	<250	16	2	1	9
	4/23/03	75	1,400	640	310	250	72	52	210
	4/23/03	143	420	220	<250	88	31	21	88
	4/23/03	165.5	210	190	<250	37	14	8	37
	7/25/03	24	84	330	<250	21	2	2	12
	7/25/03	75	740	550	<250	110	38	27	105
	7/25/03	143	210	90	<250	41	16	11	43
	7/25/03	165.5	110	140	<250	19	8	6	22
	1/22/04	24	65	370	370	18	<1	1	4
	1/22/04	75	1,400	650	330	150	48	37	140
	1/22/04	143	230	190	<250	38	15	12	47
	1/22/04	165.5	130	110	<250	18	8	7	28
	7/19/04	24	150	270	<250	36	3.5	2.5	10
	7/19/04	75	1,900	770	300	330	85	80	260
	7/19/04	143	610	310	<250	89	32	27	100
	7/19/04	165.5	190	62	<250	20	8.7	7.9	29

Table 6. Analytical Results for Ground Water in Multi-Level Wells - Organic Compounds - Redwood Oil Bulk Plant - 455 Yolanda Ave, Santa Rosa, California

Sample ID	Sample Date	Sample Depth (in feet)	TPPH(G)	TPH(D)	Motor Oil	Benzene	Toluene	Ethylbenzene	Xylenes
			< ----- ppb ----- >						
MW-21 cont.	1/20/05	24	250	470	<1,250	30	2.6	3.5	8.6
	1/20/05	75	1,200	950	<250	150	42	51	147
	1/20/05	143	660	260	<250	69	27	25	95
	1/20/05	165.5	190	160	<250	25	10	10	33
	7/12/05	24	<100	<50	<250	<0.5	<0.5	<0.5	<1.5
	7/12/05	75	720	110	<250	8.7	3.1	4.4	12.4
	7/12/05	143	120	79	<250	8.8	4.6	4.9	19.2
	7/12/05	165.5	110	<50	<250	5.0	2.8	3.0	10.2
	1/23/06	24	160	<50	<250	30	2.3	2.8	5.4
	1/23/06	75	1,100	230	<250	120	20	43	107
	1/23/06	143	280	73	<250	36	14	15	57
	1/23/06	165.5	150	56	<250	15	6.1	6.9	24.9
MW-22	10/24/02 ¹	22	—	—	—	—	—	—	---
	10/24/02	72.5	140	160	290	<1.25	<1.25	<1.25	<2.5
	10/24/02	144	<50	330	380	<0.5	<0.5	<0.5	<1
	10/24/02	177.5	<50	100	<250	<0.5	<0.5	<0.5	<1
	1/31/03	22	600	2,000	720	1	<1	<1	<1
	1/31/03	72.5	<50	120	<250	1	<1	<1	<1
	1/31/03	144	<50	120	<250	<1	<1	<1	<1
	1/31/03	177.5	<50	98	<250	<1	<1	<1	<1
	4/23/03	22	810	2,100	510	<1	<1	<1	<1
	4/23/03	72.5	<50	<50	<250	<1	<1	<1	<1
	4/23/03	144	<50	110	<250	<1	<1	<1	<1

Table 6. Analytical Results for Ground Water in Multi-Level Wells - Organic Compounds - Redwood Oil Bulk Plant - 455 Yolanda Ave, Santa Rosa, California

Sample ID	Sample Date	Sample Depth (in feet)	TPPH(G)	TPH(D)	Motor Oil	Benzene	Toluene	Ethylbenzene	Xylenes
			< ----- ppb ----- >						
MW-22 cont.	4/23/03	177.5	<50	93	<250	<1	<1	<1	<1
	7/24/03	22	1,400	1,300	420	<1	<1	<1	<1
	7/24/03	72.5	<50	<50	<250	<1	<1	<1	<1
	7/24/03	144	<50	<50	<250	<1	<1	<1	<1
	7/24/03	177.5	<50	<50	<250	<1	<1	<1	<1
	1/22/04	22	890	590	<250	<1	<1	<1	<1
	1/22/04	72.5	<50	<50	<250	<1	<1	<1	<1
	1/22/04	144	<50	<50	<250	<1	<1	<1	<1
	1/22/04	177.5	<50	72	<250	<1	<1	<1	<1
	7/19/04	22	1,500	370	<250	<5	<5	<5	<15
	7/19/04	72.5	<50	<50	<250	<0.5	<0.5	<0.5	<1.5
	7/19/04	144	<50	<50	<250	<0.5	<0.5	<0.5	<1.5
	7/19/04	177.5	<50	57	<250	<0.5	<0.5	<0.5	<1.5
	1/20/05	22	760	1,100	<250	<0.5	<0.5	<0.5	<1.5
	1/20/05	72.5	<50	<50	<250	<0.5	<0.5	<0.5	<1.5
	1/20/05	144	<50	57	<250	<0.5	<0.5	<0.5	<1.5
	1/20/05	177.5	<50	<50	<250	<0.5	<0.5	<0.5	<1.5
	7/13/05	22	1,100	<50	<250	<0.5	<0.5	<0.5	<1.5
	7/13/05	72.5	<100	<50	<250	<0.5	<0.5	<0.5	<1.5
	7/13/05	144	<100	<50	<250	<0.5	<0.5	<0.5	<1.5
	7/13/05	177.5	<100	<50	<250	<0.5	<0.5	<0.5	<1.5
	1/24/06	22	560	53	<250	1.3	<0.5	1.1	1.2
	1/24/06	72.5	<100	<50	<250	<0.5	<0.5	<0.5	<1.5
	1/24/06	144	<100	<50	<250	<0.5	<0.5	<0.5	<1.5

Table 6. Analytical Results for Ground Water in Multi-Level Wells - Organic Compounds - Redwood Oil Bulk Plant - 455 Yolanda Ave, Santa Rosa, California

Sample ID	Sample Date	Sample Depth (in feet)	TPPH(G)	TPH(D)	Motor Oil	Benzene	Toluene	Ethylbenzene	Xylenes
			< ----- ppb ----- >						
MW-22 cont.	1/24/06	177.5	<100	<50	<250	<0.5	<0.5	<0.5	<1.5
<hr/>									
MW-23	10/24/02 ¹	25	—	—	—	—	—	—	---
	10/24/02	75	<50	250	310	<0.5	<0.5	<0.5	<1
	10/24/02	148.5	<50	350	490	<0.5	<0.5	<0.5	<1
	10/24/02	180	<50	130	<250	<0.5	<0.5	<0.5	<1
	1/31/03	25	<50	<50	<250	<1	<1	<1	<1
	1/31/03	75	<50	93	<250	<1	<1	<1	<1
	1/31/03	148.5	<50	540	440	<1	<1	<1	<1
	1/31/03	180	<50	200	<250	<1	<1	<1	<1
	4/23/03	25	<50	140	310	<1	<1	<1	<1
	4/23/03	75	<50	<50	<250	<1	<1	<1	<1
	4/23/03	148.5	<50	450	360	<1	<1	<1	<1
	4/23/03	180	<50	130	<250	<1	<1	<1	<1
	7/24/03	25	<50	54	<250	<1	<1	<1	<1
	7/24/03	75	<50	<50	<250	<1	<1	<1	<1
	7/24/03	148.5	<50	270	<250	<1	<1	<1	<1
	7/24/03	180	<50	57	<250	<1	<1	<1	<1
	1/22/04	25	<50	110	<250	<1	<1	<1	<1
	1/22/04	75	<50	<50	<250	<1	<1	<1	<1
	1/22/04	148.5	<50	450	370	<1	<1	<1	<1
	1/22/04	180	<50	58	<250	<1	<1	<1	<1
	7/19/04	25	<50	70	<250	<0.5	<0.5	<0.5	<1.5

Table 6. Analytical Results for Ground Water in Multi-Level Wells - Organic Compounds - Redwood Oil Bulk Plant - 455 Yolanda Ave, Santa Rosa, California

Sample ID	Sample Date	Sample Depth (in feet)	TPPH(G)	TPH(D)	Motor Oil	Benzene	Toluene	Ethylbenzene	Xylenes
			< ----- ppb ----- >						
MW-23 cont	7/19/04	75	<50	57	<250	<0.5	<0.5	<0.5	<1.5
	7/19/04	148.5	<50	190	<250	<0.5	<0.5	<0.5	<1.5
	7/19/04	180	<50	<50	<250	<0.5	<0.5	<0.5	<1.5
	1/20/05	25	<50	70	<250	<0.5	<0.5	<0.5	<1.5
	1/20/05	75	<50	240	<250	<0.5	<0.5	<0.5	<1.5
	1/20/05	148.5	<50	410	<250	<0.5	<0.5	<0.5	<1.5
	1/20/05	180	<50	250	<250	<0.5	<0.5	<0.5	<1.5
	7/13/05	25	<100	59	<250	<0.5	<0.5	<0.5	<1.5
	7/13/05	75	<100	<50	<250	<0.5	<0.5	<0.5	<1.5
	7/13/05	148.5	<100	<50	<250	<0.5	<0.5	<0.5	<1.5
	7/13/05	180	<100	<50	<250	<0.5	<0.5	<0.5	<1.5
	1/24/06	25	<100	69	250	<0.5	<0.5	<0.5	<1.5
	1/24/06	75	<100	<50	<250	<0.5	<0.5	<0.5	<1.5
	1/24/06	148.5	<100	<50	<250	<0.5	0.6	<0.5	<1.5
	1/24/06	180	<100	<50	<250	<0.5	<0.5	<0.5	<1.5

Explanation:

TPPH(G) = Total Purgeable Petroleum Hydrocarbons as Gasoline

TPH(D) = Total Petroleum Hydrocarbons as Diesel

ppb = parts per billion

Notes:

¹ Port was dry.

Table 7. Water Level Data/Well Construction Details - Redwood Oil Bulk Plant, 455 Yolanda Ave. Santa Rosa, CA

Well ID	Sample Date	TOC (Ft, msl)	DTW (Ft)	GWE (Ft, msl)	Product (ft)	Screen Interval	Sand Pack Interval	Bentonite/ Grout Interval	Notes
MW-1	01/11/91	---	102.77	---	--	9 - 24	7 - 24	0 - 7	
	02/08/91	---		---	---				
	03/08/91	---		---	---				
	06/13/91	22.02		80.75	0.00				
	07/09/91	22.22		80.55	0.00				
	08/01/91	22.00		80.77	0.00				
	08/29/91	21.73		81.04	0.00				
	09/11/91	21.75		81.02	0.00				
	10/08/91	22.04		80.73	0.00				
	11/08/91	22.23		80.54	0.00				
	12/11/91	---		---	0.00				
	01/13/92	21.41		81.36	0.00				
	02/11/92	20.25		82.52	0.00				
	03/11/92	12.79		89.98	0.00				
	04/13/92	13.76		89.01	0.00				
	05/15/92	15.49		87.28	0.00				
	06/15/92	16.85		85.92	0.00				
	07/16/92	17.74		85.03	0.00				
	08/18/92	17.56		85.21	0.00				
	09/18/92	18.62		84.15	0.00				
	12/08/92	18.38		84.39	0.00				
	03/10/93	13.29		89.48	0.00				
	06/04/93	12.77	102.78	90.00	0.00				
	10/14/93	23.66		79.11	0.00				
	04/11/94	14.58		88.19	0.00				
	10/19/94	14.51		88.26	0.00				
	04/11/95	9.18		93.59	0.00				
	03/06/96	10.16		92.61	0.00				
	10/14/96	12.36		90.42	0.00				Top of casing elevations re-surveyed.
	04/09/97	10.75		92.03	0.00				
	10/29/97	13.28		89.50	0.00				
	04/07/98	8.06		94.72	0.00				
	10/07/98	11.51		91.27	0.00				
	04/07/99	8.71		94.07	0.00				

Table 7. Water Level Data/Well Construction Details - Redwood Oil Bulk Plant, 455 Yolanda Ave. Santa Rosa, CA

Well ID	Sample Date	TOC (Ft, msl)	DTW (Ft)	GWE (Ft, msl)	Product (ft)	Screen Interval	Sand Pack Interval	Bentonite/ Grout Interval	Notes
MW-1	10/19/99	11.98	102.78 146.16 148.81	90.80	0.00	9 - 24	7 - 24	0 - 7	
	04/26/00	---		---	0.00				Well inaccessible due to construction activities.
	10/30/00	11.41		134.75	0.00				Top of casing elevations re-surveyed.
	02/01/01	11.28		134.88	0.00				
	04/23/01	14.29		131.87	0.00				
	07/23/01	14.88		131.28	0.00				
	10/23/01	16.46		129.70	0.00				
	01/21/02	12.77		136.04	0.00				Top of casing elevations were surveyed for EDF compliance.
	04/25/02	12.80		136.01	0.00				
	07/22/02	13.20		135.61	0.00				
	10/22/02	13.76		135.05	0.00				
	01/27/03	13.00		135.81	0.00				
	04/21/03	12.85		135.96	0.00				
	07/21/03	13.36		135.45	0.00				
	01/20/04	10.04		138.77	0.00				
	07/19/04	13.04		135.77	0.00				
	01/18/05	9.96		138.85	0.00				
	07/12/05	9.40		139.41	0.00				
	09/09/05	10.39		138.42	0.00				
MW-2	01/11/91	21.36	102.18	80.82	0.00	10 - 25	7.5 - 25	0 - 7.5	
	02/08/91	18.24		83.94	0.00				
	03/08/91	16.52		85.66	0.00				
	06/13/91	20.95		81.23	0.00				
	07/09/91	20.98		81.20	0.00				
	08/01/91	20.98		81.20	0.00				
	08/29/91	21.28		80.90	0.00				
	09/11/91	21.36		80.82	0.00				
	10/08/91	21.83		80.25	0.22				
	11/08/91	20.56		81.62	0.00				
	12/11/91	21.08		81.10	0.00				
	01/13/92	18.56		83.62	0.00				
	02/11/92	14.30		87.88	0.00				

Table 7. Water Level Data/Well Construction Details - Redwood Oil Bulk Plant, 455 Yolanda Ave. Santa Rosa, CA

Well ID	Sample Date	TOC (Ft, msl)	DTW (Ft)	GWE (Ft, msl)	Product (ft)	Screen Interval	Sand Pack Interval	Bentonite/ Grout Interval	Notes
MW-2	03/11/92	11.81	102.18	90.37	0.00	10 - 25	7.5 - 25	0 - 7.5	
	04/13/92	13.23		88.95	0.00				
	05/15/92	15.09		87.09	0.00				
	06/15/92	16.95		85.23	0.00				
	07/16/92	17.96		84.22	0.00				
	08/18/92	17.76		84.42	0.00				
	09/18/92	18.75		83.43	0.00				
	12/08/92	14.66		87.52	0.00				
	03/10/93	12.80		89.38	0.00				
	06/04/93	13.25		88.93	0.00				
	10/14/93	16.20		85.98	0.00				
	04/11/94	14.85		87.33	0.00				
	10/19/94	15.04		87.14	0.00				
	04/11/95	9.77		92.41	0.00				
	03/06/96	10.12		92.06	0.00				
	10/14/96	12.45		89.74	0.00				
	04/10/97	10.79		91.40	0.00				
	10/28/97	13.32		88.87	0.00				
	04/07/98	8.02		94.17	0.00				
	10/07/98	11.64		90.55	0.00				
	04/07/99	8.79		93.40	0.00				
	10/19/99	12.05		90.14	0.00				
	04/26/00	---		---	---				Well inaccessible due to construction activities.
	10/30/00	10.80	145.32	134.52	0.00				Top of casing elevations re-surveyed.
	02/01/01	10.70		134.62	0.00				
	04/23/01	13.74		131.58	0.00				
	07/23/01	14.22		131.10	0.00				
	10/23/01	16.04		129.28	0.00				
	01/21/02	13.36		134.61	0.00				
	04/25/02	13.80		134.17	0.00				
	07/22/02	13.81		134.16	0.00				
	10/22/02	13.82		134.15	0.00				
	01/27/03	13.18	147.97	134.79	0.00				Top of casing elevations were surveyed for EDF compliance.

Table 7. Water Level Data/Well Construction Details - Redwood Oil Bulk Plant, 455 Yolanda Ave. Santa Rosa, CA

Well ID	Sample Date	TOC (Ft, msl)	DTW (Ft)	GWE (Ft, msl)	Product (ft)	Screen Interval	Sand Pack Interval	Bentonite/ Grout Interval	Notes
MW-2	04/21/03	12.34	147.97	135.63	0.00	10 - 25	7.5 - 25	0 - 7.5	
	07/21/03	13.01		134.96	0.00				
	01/20/04	11.81		136.16	0.00				
	07/19/04	12.84		135.13	0.00				
	01/18/05	11.14		136.83	0.00				
	07/12/05	11.02		136.95	0.00				
	09/09/05	11.92		136.05	0.00				
MW-3	01/11/91	---	101.94	---	---	18 - 33	17 - 33	0 - 17	
	02/08/91	---		---	---				
	03/08/91	28.28		73.66	0.00				
	06/13/91	---		---	---				
	07/09/91	---		---	---				
	08/01/91	---		---	---				
	08/29/91	---		---	---				
	09/11/91	---		---	---				
	10/08/91	---		---	---				
	11/08/91	---		---	---				
	12/11/91	---		---	---				
	01/13/92	---		---	---				
	02/11/92	18.82		83.12	0.00				
	03/11/92	11.76		90.18	0.00				
	04/13/92	12.25		89.69	0.00				
	05/15/92	15.35		86.59	0.00				
	06/15/92	17.61		84.33	0.00				
	07/16/92	19.86		82.08	0.00				
	08/18/92	19.66		82.28	0.00				
	10/18/92	26.00		75.94	0.00				
	12/08/92	17.24		84.70	0.00				
	03/10/93	14.60		87.34	0.00				
	06/04/93	13.95		87.99	0.00				
	10/14/93	---		---	---				
	04/11/94	16.58		85.36	0.00				
	10/19/94	16.01		85.93	0.00				

Table 7. Water Level Data/Well Construction Details - Redwood Oil Bulk Plant, 455 Yolanda Ave. Santa Rosa, CA

Well ID	Sample Date	TOC (Ft, msl)	DTW (Ft)	GWE (Ft, msl)	Product (ft)	Screen Interval	Sand Pack Interval	Bentonite/ Grout Interval	Notes
MW-3	04/11/95	11.12	101.94	90.82	0.00	18 - 33	17 - 33	0 - 17	
	03/06/96	11.72		90.22	0.00				
	10/14/96	13.94		88.03	0.00				
	04/10/97	12.08		89.90	0.01				
	10/29/97	16.02		85.99	0.02				
	04/07/98	9.97		92.00	0.00				
	10/07/98	12.66		89.31	0.00				
	04/07/99	9.70		92.27	0.00				
	10/19/99	13.15		88.82	0.00				
	04/26/00	---		---	---				Well inaccessible due to construction activities.
	10/30/00	---	145.10	---	---				Well plugged at seven feet, no water.
	02/01/01	12.33		132.77	0.00				
	04/23/01	---		---	---				Well was inaccessible
	07/23/01	14.98		130.12	0.00				
	10/23/01	17.00		128.10	0.00				
	01/21/02	13.67	147.75	134.08	0.00				Top of casing elevations were surveyed for EDF compliance.
	04/25/02	14.50		133.25	0.00				
	07/22/02	14.96		132.79	0.00				
	10/22/02	15.22		132.53	0.00				
	01/27/03	14.21		133.54	0.00				
	04/21/03	13.47		134.28	0.00				
	07/21/03	14.43		133.32	0.00				
	01/20/04	12.00		135.75	0.00				
	07/19/04	14.03		133.72	0.00				
	01/18/05	11.11		136.64	0.00				
	07/12/05	11.68		136.07	0.00				
MW-4	01/11/91	---	101.47	---	---	10 - 25	7 - 25	0 - 7	
	02/08/91	---		---	---				
	03/08/91	---		---	---				
	06/13/91	---		---	---				
	07/09/91	---		---	---				
	08/01/91	---		---	---				

Table 7. Water Level Data/Well Construction Details - Redwood Oil Bulk Plant, 455 Yolanda Ave. Santa Rosa, CA

Well ID	Sample Date	TOC (Ft, msl)	DTW (Ft)	GWE (Ft, msl)	Product (ft)	Screen Interval	Sand Pack Interval	Bentonite/ Grout Interval	Notes
MW-4	08/29/91	---	101.47	---	---	10 - 25	7 - 25	0 - 7	
	09/11/91	---		---	---				
	10/08/91	---		---	---				
	11/08/91	---		---	---				
	12/11/91	---		---	---				
	01/13/92	24.47		77.00	0.00				
	02/11/92	26.06		75.41	0.00				
	03/11/92	23.46		78.01	0.00				
	04/13/92	24.25		77.22	0.00				
	05/15/92	---		---	---				
	06/15/92	---		---	---				
	07/16/92	---		---	---				
	08/18/92	---		---	---				
	09/18/92	---		---	---				
	12/08/92	---		---	---				
	03/10/93	---		---	---				
	06/04/93	---		---	---				
	10/14/93	---		---	---				
	04/11/94	---		---	---				
	10/19/94	---		---	---				
	04/11/95	---		---	---				
	03/06/96	16.52	101.70	84.95	0.00				
	10/14/96	20.39		81.31	0.00				
	04/10/97	16.02		85.68	0.00				
	10/29/97	21.61		80.09	0.00				
	04/07/98	11.30		90.40	0.00				
	10/07/98	15.53		86.17	0.00				
	04/07/99	11.95		89.75	0.00				
	10/19/99	15.15		86.55	0.00				
	04/26/00	10.38		91.32	0.00				
	06/01/00	---		---	---				
	10/30/00	13.78	145.47	131.69	0.00				Top of casing elevations were surveyed.
	02/01/01	13.41		132.06	0.00				
	04/23/01	19.27		126.20	0.00				

Table 7. Water Level Data/Well Construction Details - Redwood Oil Bulk Plant, 455 Yolanda Ave. Santa Rosa, CA

Well ID	Sample Date	TOC (Ft, msl)	DTW (Ft)	GWE (Ft, msl)	Product (ft)	Screen Interval	Sand Pack Interval	Bentonite/ Grout Interval	Notes
MW-4	07/23/01	17.65	145.47 148.12	127.82	0.00	10 - 25	7 - 25	0 - 7	
	10/23/01	19.88		125.59	0.00				
	01/21/02	13.62		134.50	0.00				Top of casing elevations were surveyed for EDF compliance.
	04/25/02	14.47		133.65	0.00				
	07/22/02	15.57		132.55	0.00				
	10/22/02	17.23		130.89	0.00				
	01/27/03	13.00		135.12	0.00				
	04/21/03	13.42		134.70	0.00				
	07/21/03	14.15		133.97	0.00				
	01/20/04	11.67		136.45	0.00				
	07/19/04	14.47		133.65	0.00				
	01/18/05	11.31		136.81	0.00				
	07/12/05	11.53		136.59	0.00				
MW-5	06/13/91	25.84	101.37	75.53	0.00	34.5 - 44.5	32.5 - 44.5	0 - 32.5	
	07/09/91	25.98		75.39	0.00				
	08/01/91	23.22		78.15	0.00				
	08/29/91	22.79		78.58	0.00				
	09/11/91	22.58		78.79	0.00				
	10/08/91	27.46		73.91	0.00				
	11/08/91	24.36		77.01	0.00				
	12/11/91	23.35		78.02	0.00				
	01/13/92	23.96		77.41	0.00				
	02/11/92	23.67		77.70	0.00				
	03/11/92	22.01		79.36	0.00				
	04/13/92	21.50		79.87	0.00				
	05/15/92	18.96		82.41	0.00				
	06/15/92	18.72		82.65	0.00				
	07/16/92	19.88		81.49	0.00				
	08/18/92	19.38		81.99	0.00				
	09/18/92	19.60		81.77	0.00				
	12/08/92	20.04		81.33	0.00				
	03/10/93	16.60		84.77	0.00				

Table 7. Water Level Data/Well Construction Details - Redwood Oil Bulk Plant, 455 Yolanda Ave. Santa Rosa, CA

Well ID	Sample Date	TOC (Ft, msl)	DTW (Ft)	GWE (Ft, msl)	Product (ft)	Screen Interval	Sand Pack Interval	Bentonite/ Grout Interval	Notes
MW-5	06/04/93	15.96	101.37	85.41	0.00	34.5 - 44.5	32.5 - 44.5	0 - 32.5	
	10/14/93	18.68		82.69	0.00				
	04/11/94	14.46		86.91	0.00				
	10/19/94	15.56		85.81	0.00				
	04/11/95	9.52		91.85	0.00				
	03/06/96	10.60		90.77	0.00				
	10/14/96	11.81		89.53	0.00				
	04/09/97	10.08		91.26	0.00				
	10/29/97	15.05		86.29	0.00				
	04/07/98	8.01		93.33	0.00				
	10/07/98	9.82		91.52	0.00				
	04/07/99	9.12		92.22	0.00				
	10/19/99	12.96		88.38	0.00				
	04/26/00	9.28		92.06	0.00				
	10/30/00	---	145.73	---	---				Well inaccessible due to area flooding
	02/01/01	11.52		134.21	0.00				
	04/23/01	15.25		130.48	0.00				
	07/23/01	13.22		132.51	0.00				
	10/23/01	13.15		132.58	0.00				
	01/21/02	12.50	148.38	135.88	0.00				Top of casing elevations were surveyed for EDF compliance.
	04/25/02	12.02		136.36	0.00				
	07/22/02	11.00		137.38	0.00				
	10/22/02	11.40		136.98	0.00				
	01/27/03	10.78		137.60	0.00				
	04/21/03	9.15		139.23	0.00				
	01/20/04	8.00		140.38	0.00				
	07/19/04	10.53		137.85	0.00				
	01/18/05	10.09		138.29	0.00				
	07/12/05	7.11		141.27	0.00				

Table 7. Water Level Data/Well Construction Details - Redwood Oil Bulk Plant, 455 Yolanda Ave. Santa Rosa, CA

Well ID	Sample Date	TOC (Ft, msl)	DTW (Ft)	GWE (Ft, msl)	Product (ft)	Screen Interval	Sand Pack Interval	Bentonite/ Grout Interval	Notes
MW-5A	10/14/96	11.80	101.37	89.57	0.00	50 - 60	49 - 60	0 - 49	
	04/10/97	10.16		91.21	0.00				
	10/29/97	16.80		84.57	0.00				
	04/07/98	9.64		91.73	0.00				
	10/07/98	10.09		91.28	0.00				
	04/07/99	7.55		93.82	0.00				
	10/19/99	---		---	---				Well casing was damaged.
	04/26/00	7.58	101.37	93.79	0.00				
	10/30/00	---		---	---				Well inaccessible due to area flooding
	02/01/01	11.17		134.53	0.00				
	04/23/01	11.75		133.95	0.00				
	07/23/01	12.58		133.12	0.00				
	10/23/01	13.71		131.99	0.00				
	01/21/02	12.55	148.35	135.80	0.00				Top of casing elevations were surveyed for EDF compliance.
	04/25/02	11.45		136.90	0.00				
	07/22/02	10.75		137.60	0.00				
	10/22/02	10.90		137.45	0.00				
	01/27/03	10.31		138.04	0.00				
	04/21/03	10.35		138.00	0.00				
	07/19/04	10.03		138.32	0.00				
	01/18/05	10.15		138.20	0.00				
	07/12/05	8.42		139.93	0.00				
MW-7	06/13/91	34.93	100.86	65.93	0.00	51 - 60	49 - 60	0 - 49	
	07/09/91	35.05		65.81	0.00				
	08/01/91	35.76		65.10	0.00				
	08/29/91	37.28		63.58	0.00				
	09/11/91	36.71		64.15	0.00				
	10/08/91	36.59		64.27	0.00				
	11/08/91	36.31		64.55	0.00				
	12/11/91	36.55		63.31	0.00				
	01/13/92	37.03		63.83	0.00				
	02/11/92	36.20		64.66	0.00				

Table 7. Water Level Data/Well Construction Details - Redwood Oil Bulk Plant, 455 Yolanda Ave. Santa Rosa, CA

Well ID	Sample Date	TOC (Ft, msl)	DTW (Ft)	GWE (Ft, msl)	Product (ft)	Screen Interval	Sand Pack Interval	Bentonite/ Grout Interval	Notes
MW-7	03/11/92	34.51	100.86	66.35	0.00	51 - 60	49 - 60	0 - 49	
	04/13/92	33.85		67.01	0.00				
	05/15/92	33.04		67.82	0.00				
	06/15/92	35.53		65.33	0.00				
	07/16/92	35.42		65.44	0.00				
	08/18/92	35.03		65.83	0.00				
	09/18/92	35.52		65.34	0.00				
	12/08/92	34.36		66.50	0.00				
	03/10/93	30.21		70.65	0.00				
	06/04/93	29.33		71.53	0.00				
	10/14/93	32.23		68.63	0.00				
	04/11/94	28.87		71.99	0.00				
	10/19/94	31.19		69.67	0.00				
	04/11/95	22.49		78.37	0.00				
	03/06/96	21.44		79.42	0.00				
	10/14/96	---	101.03	---	---				Top of casing elevations re-surveyed.
	04/09/97	20.67		80.36	0.00				
	10/29/97	24.71		76.32	0.00				
	04/07/98	16.96		84.07	0.00				
	10/07/98	19.46		81.57	0.00				
	04/07/99	15.27		85.76	0.00				
	10/19/99	18.79		82.24	0.00				
	04/26/00	13.45		87.58	0.00				
	10/30/00	17.01	144.72	127.71	0.00				Top of casing elevations re-surveyed.
	02/01/01	16.17		128.55	0.00				
	04/23/01	18.12		126.60	0.00				
	07/23/01	19.53		125.19	0.00				
	10/23/01	22.00		122.72	0.00				
	01/21/02	16.30	147.37	131.07	0.00				Top of casing elevations were resurveyed for EDF compliance.
	04/25/02	16.27		131.10	0.00				
	07/22/02	17.81		129.56	0.00				
	10/22/02	18.90		128.47	0.00				
	01/27/03	15.20		132.17	0.00				

Table 7. Water Level Data/Well Construction Details - Redwood Oil Bulk Plant, 455 Yolanda Ave. Santa Rosa, CA

Well ID	Sample Date	TOC (Ft, msl)	DTW (Ft)	GWE (Ft, msl)	Product (ft)	Screen Interval	Sand Pack Interval	Bentonite/ Grout Interval	Notes
MW-7	04/21/03	14.92	147.37	132.45	0.00	51 - 60	49 - 60	0 - 49	
	07/21/03	16.27		131.10	0.00				
	01/20/04	14.37		133.00	0.00				
	07/19/04	17.90		129.47	0.00				
	01/18/05	12.07		135.30	0.00				
	07/12/05	13.00		134.37	0.00				
	09/09/05	14.86		132.51	0.00				
MW-8	06/13/91	32.68	101.53	68.85	0.00	49 - 59	47.5 - 59	0 - 47.5	
	07/09/91	32.81		68.72	0.00				
	08/01/91	33.26		68.27	0.00				
	08/29/91	34.06		67.47	0.00				
	09/11/91	34.70		66.83	0.00				
	10/08/91	37.63		63.90	0.00				
	11/08/91	35.73		65.80	0.00				
	12/11/91	34.99		66.54	0.00				
	01/13/92	34.34		67.19	0.00				
	02/11/92	34.54		66.99	0.00				
	03/11/92	32.42		69.11	0.00				
	04/13/92	30.46		71.07	0.00				
	05/15/92	30.80		70.73	0.00				
	06/15/92	31.82		69.71	0.00				
	07/16/92	33.01		68.52	0.00				
	08/18/92	32.90		68.63	0.00				
	09/18/92	33.60		67.93	0.00				
	12/08/92	33.07		68.46	0.00				
	03/10/93	26.87		74.66	0.00				
	06/04/93	25.39		76.14	0.00				
	10/14/93	29.90		71.63	0.00				
	04/11/94	26.70		74.83	0.00				
	10/19/94	15.56		85.97	0.00				
	04/11/95	19.87		81.66	0.00				
	03/06/96	19.03		82.50	0.00				
	10/14/96	22.90	101.42	78.52	0.00				Top of casing elevation re-surveyed.

Table 7. Water Level Data/Well Construction Details - Redwood Oil Bulk Plant, 455 Yolanda Ave. Santa Rosa, CA

Well ID	Sample Date	TOC (Ft, msl)	DTW (Ft)	GWE (Ft, msl)	Product (ft)	Screen Interval	Sand Pack Interval	Bentonite/ Grout Interval	Notes
MW-8	04/10/97	19.06	101.42	82.36	0.00	49 - 59	47.5 - 59	0 - 47.5	
	10/29/97	23.91		77.51	0.00				
	04/07/98	15.15		86.27	0.00				
	10/07/98	19.02		82.40	0.00				
	04/07/99	14.39		87.03	0.00				
	10/19/99	19.40		82.02	0.00				
	04/26/00	13.78		87.64	0.00				
	10/30/00	17.90	144.85	126.95	0.00				Top of casing elevation re-surveyed.
	02/01/01	16.78		128.07	0.00				
	04/23/01	17.25		127.60	0.00				
	07/23/01	19.18	144.85	125.67	0.00				
	10/23/01	21.80		123.05	0.00				
	01/21/02	14.21	147.50	133.29	0.00				Top of casing elevations were surveyed for EDF compliance.
	04/25/02	15.82		131.68	0.00				
	07/22/02	15.50		132.00	0.00				
	10/22/02	18.70		128.80	0.00				
	01/27/03	14.85		132.65	0.00				
	04/21/03	14.80		132.70	0.00				
	07/21/03	16.30		131.20	0.00				
	01/20/04	14.31		133.19	0.00				
	07/19/04	15.65		131.85	0.00				
	01/18/05	12.65		134.85	0.00				
MW-9	10/14/96	16.40	100.29	83.89	0.00	8 - 26	7 - 26	0 - 7	
	04/10/97	12.98		87.31	0.00				
	10/29/97	16.06		84.23	0.00				
	04/07/98	10.31		89.98	0.00				
	10/07/98	14.48		85.81	0.00				
	04/07/99	10.90		89.39	0.00				
	10/19/99	14.65		82.08	0.00				
	04/26/00	11.51		88.78	0.00				
	10/30/00	14.42	144.66	130.24	0.00				Top of casing elevation surveyed.
	02/01/01	14.12		130.54	0.00				

Table 7. Water Level Data/Well Construction Details - Redwood Oil Bulk Plant, 455 Yolanda Ave. Santa Rosa, CA

Well ID	Sample Date	TOC (Ft, msl)	DTW (Ft)	GWE (Ft, msl)	Product (ft)	Screen Interval	Sand Pack Interval	Bentonite/ Grout Interval	Notes
MW-9	04/23/01	15.54	144.66	129.12	0.00	8 - 26	7 - 26	0 - 7	
	07/23/01	16.45		128.21	0.00				
	10/23/01	18.80		125.86	0.00				
	01/21/02	15.52		131.79	0.00				Top of casing elevations were surveyed for EDF compliance.
	04/25/02	14.64		132.67	0.00				
	07/22/02	17.55		129.76	0.00				
	10/22/02	16.00		131.31	0.00				
	01/27/03	13.64		133.67	0.00				
	04/21/03	13.75		133.56	0.00				
	07/21/03	14.60	147.31	132.71	0.00				
	01/20/04	13.12		134.19	0.00				
	07/19/04	14.36		132.95	0.00				
	01/18/05	11.76		135.55	0.00				
MW-10	04/10/99	12.04	102.04	0.00	0.00	5 - 20	4.5 - 20	0 - 4.5	
	10/19/99	13.33		0.00	0.00				
	04/26/00	9.55		---	0.00				
	10/30/00	10.25	145.40	135.15	0.00				Top of casing elevation surveyed.
	02/01/01	11.37		134.03	0.00				
	04/23/01	13.92		131.48	0.00				
	07/23/01	14.75		130.65	0.00				
	10/23/01	17.21		128.19	0.00				
	01/21/02	13.00	148.05	135.05	0.00				Top of casing elevations were surveyed for EDF compliance.
	04/25/02	14.05		134.00	0.00				
	07/22/02	14.30		133.75	0.00				
	10/22/02	14.70		133.35	0.00				
	01/27/03	12.62		135.43	0.00				
	04/21/03	12.81		135.24	0.00				
	07/21/03	13.75		134.30	0.00				
	01/20/04	11.71		136.34	0.00				
	07/19/04	13.36		134.69	0.00				
	01/18/05	10.05		138.00	0.00				

Table 7. Water Level Data/Well Construction Details - Redwood Oil Bulk Plant, 455 Yolanda Ave. Santa Rosa, CA

Well ID	Sample Date	TOC (Ft, msl)	DTW (Ft)	GWE (Ft, msl)	Product (ft)	Screen Interval	Sand Pack Interval	Bentonite/ Grout Interval	Notes
MW-10	07/12/05	11.60	148.05	136.45	0.00	5 - 20	4.5 - 20	0 - 4.5	
	09/09/05	12.76		135.29	0.00				
MW-11	05/08/00	18.21	101.74 146.37	83.53	0.00	15-35	13-35	0-13	
	06/07/00	19.05		82.69	0.00				
	10/30/00	23.70		122.67	0.00				Top of casing elevation surveyed.
	02/01/01	21.73		124.64	0.00				
	04/23/01	20.21		126.16	0.00				
	07/23/01	22.69		123.68	0.00				
	10/23/01	25.65		120.72	0.00				
	01/21/02	17.95	149.02	131.07	0.00				Top of casing elevations were surveyed for EDF compliance.
	04/25/02	17.35		131.67	0.00				
	07/22/02	20.10		128.92	0.00				
	10/22/02	21.91		127.11	0.00				
	01/27/03	17.32		131.70	0.00				
	04/21/03	16.36		132.66	0.00				
	07/21/03	18.08		130.94	0.00				
	01/20/04	16.27		132.75	0.00				
	07/19/04	---		---	---				
MW-12	05/08/00	20.75	101.15 146.38	80.40	0.00	10 - 30	8 - 30	0 - 8	
	06/07/00	21.25		79.90	0.00				
	10/30/00	25.43		120.95	0.00				Top of casing elevation surveyed.
	02/01/01	24.27		122.11	0.00				
	04/23/01	22.00		124.38	0.00				
	07/23/01	24.11		122.27	0.00				
	10/23/01	26.38		120.00	0.00				
	01/21/02	19.70	149.03	129.33	0.00				Top of casing elevations were surveyed for EDF compliance.
	04/25/02	18.91		130.12	0.00				
	07/22/02	21.21		127.82	0.00				
	10/22/02	23.98		125.05	0.00				
	01/27/03	18.75		130.28	0.00				

Table 7. Water Level Data/Well Construction Details - Redwood Oil Bulk Plant, 455 Yolanda Ave. Santa Rosa, CA

Well ID	Sample Date	TOC (Ft, msl)	DTW (Ft)	GWE (Ft, msl)	Product (ft)	Screen Interval	Sand Pack Interval	Bentonite/ Grout Interval	Notes
MW-12	04/21/03	17.81	149.03	131.22	0.00	10 - 30	8 - 30	0 - 8	
	07/21/03	19.71		129.32	0.00				
	01/20/04	18.43		130.60	0.00				
	07/19/04	18.39		130.64	0.00				
	01/18/05	16.94		132.09	0.00				
MW-13	05/08/00	22.60	101.81 147.32	79.21	0.00	10 - 30	8 - 30	0 - 8	
	06/07/00	23.03		78.78	0.00				
	10/30/00	27.14		120.18	0.00				Top of casing elevation surveyed.
	02/01/01	26.11		121.21	0.00				
	04/23/01	23.56		123.76	0.00				
	07/23/01	25.76		121.56	0.00				
	10/23/01	27.60		119.72	0.00				Monitoring well has been abandoned.
MW-14	05/08/00	20.37	99.77 144.96	79.40	0.00	10-30	8-30	0-8	
	06/07/00	20.72		79.05	0.00				
	10/30/00	24.61		120.35	0.00				Top of casing elevation surveyed.
	02/01/01	23.57		121.39	0.00				
	04/23/01	21.13		123.83	0.00				
	07/23/01	23.18		121.78	0.00				
	10/23/01	25.50		119.46	0.00				Monitoring well has been abandoned.
MW-15	05/08/00	13.51	---	---	0.00	8-25	7-25	0-7	
	06/07/00	13.73		101.06	87.33				
	10/30/00	14.64		145.44	130.80				Top of casing elevation surveyed.
	02/01/01	15.04			130.40				
	04/23/01	16.72			128.72				
	07/23/01	19.62			125.82				
	10/23/01	22.17			123.27				
	01/21/02	14.80	148.09	133.29	0.00				Top of casing elevations were surveyed for EDF compliance.
	04/25/02	14.88			133.21				
	07/22/02	16.47			131.62				
	10/22/02	18.84			129.25				

Table 7. Water Level Data/Well Construction Details - Redwood Oil Bulk Plant, 455 Yolanda Ave. Santa Rosa, CA

Well ID	Sample Date	TOC (Ft, msl)	DTW (Ft)	GWE (Ft, msl)	Product (ft)	Screen Interval	Sand Pack Interval	Bentonite/ Grout Interval	Notes
MW-15	01/27/03	13.88	148.09	134.21	0.00	8-25	7-25	0-7	
	04/21/03	13.31		134.78	0.00				
	07/21/03	14.11		133.98	0.00				
	01/20/04	13.15		134.94	0.00				
	07/19/04	13.12		134.97	0.00				
	01/18/05	11.58		136.51	0.00				
	07/12/05	11.23		136.86	0.00				
MW-16	05/08/00	14.85	147.68	---	---	8-25	7-25	0-7	
	06/07/00	15.53		102.58	87.05				
	10/30/00	18.77		128.91	0.00				Top of casing elevation surveyed.
	02/01/01	18.17		129.51	0.00				
	04/23/01	14.58		133.10	0.00				
	07/23/01	24.26		123.42	0.00				
	10/23/01	23.40		124.28	0.00				
	01/21/02	14.11	150.33	136.22	0.00				Top of casing elevations were surveyed for EDF compliance.
	04/25/02	13.66		136.67	0.00				
	07/22/02	17.60		132.73	0.00				
	10/22/02	18.75		131.58	0.00				
	01/27/03	12.97		137.36	0.00				
	04/21/03	13.98		136.35	0.00				
	07/21/03	14.66		135.67	0.00				
	01/20/04	12.38		137.95	0.00				
	07/19/04	13.41		136.92	0.00				
	01/18/05	11.38		138.95	0.00				
	07/12/05	11.38		138.95	0.00				
MW-17	05/08/00	7.80	148.28	103.65	95.85	8 - 25	7 - 25	0 - 7	
	06/07/00	8.51		95.14	0.00				
	10/30/00	17.00		131.28	0.00				Top of casing elevation surveyed.
	02/01/01	7.86		140.42	0.00				
	04/23/01	8.38		139.90	0.00				
	08/22/01	11.80		136.48	0.00				

Table 7. Water Level Data/Well Construction Details - Redwood Oil Bulk Plant, 455 Yolanda Ave. Santa Rosa, CA

Well ID	Sample Date	TOC (Ft, msl)	DTW (Ft)	GWE (Ft, msl)	Product (ft)	Screen Interval	Sand Pack Interval	Bentonite/ Grout Interval	Notes
MW-17	10/23/01	13.15	148.28 150.93	135.13	0.00	8 - 25	7 - 25	0 - 7	
	01/21/02	7.10		143.83	0.00				Top of casing elevations were surveyed for EDF compliance.
	04/25/02	6.70		144.23	0.00				
	07/22/02	---		---	---				Well was inaccessible
	10/22/02	11.31		139.62	0.00				
	01/27/03	9.55		141.38	0.00				
	04/21/03	—		—	---				Well was inaccessible
	01/20/04	—		—	---				Well was inaccessible
	07/19/04	---		---	---				
	01/17/05	---		---	---				
MW-18	07/12/05	7.07	99.67 144.14 146.79	143.86	0.00	8 - 25	7 - 25	0 - 7	
	05/08/00	11.20		88.47	0.00				
	06/07/00	11.56		88.11	0.00				
	10/30/00	14.79		129.35	0.00				Top of casing elevation surveyed.
	02/01/01	13.91		130.23	0.00				
	04/23/01	13.30		130.84	0.00				
	07/23/01	14.71		129.43	0.00				
	10/23/01	18.15		125.99	0.00				
	01/21/02	12.15	146.79	134.64	0.00				Top of casing elevations were surveyed for EDF compliance.
	04/25/02	12.29		134.50	0.00				
	07/22/02	13.76		133.03	0.00				
	10/22/02	14.76		132.03	0.00				
	01/27/03	11.41		135.38	0.00				
	04/21/03	11.58		135.21	0.00				
	07/21/03	12.71		134.08	0.00				
	01/20/04	11.19		135.60	0.00				
	07/19/04	12.67		134.12	0.00				
	01/17/05	10.91		135.88	0.00				

Table 7. Water Level Data/Well Construction Details - Redwood Oil Bulk Plant, 455 Yolanda Ave. Santa Rosa, CA

Well ID	Sample Date	TOC (Ft, msl)	DTW (Ft)	GWE (Ft, msl)	Product (ft)	Screen Interval	Sand Pack Interval	Bentonite/ Grout Interval	Notes
MW-19	05/08/00	8.95	100.42 145.18 147.83	91.47	0.00	8 - 25	7 - 25	0 - 7	
	06/07/00	9.62		90.80	0.00				
	10/30/00	12.66		132.52	0.00				Top of casing elevation surveyed.
	02/01/01	12.65		132.53	0.00				
	04/23/01	10.55		134.63	0.00				
	07/23/01	12.27		132.91	0.00				
	10/23/01	13.92		131.26	0.00				
	01/21/02	9.44		138.39	0.00				Top of casing elevations were surveyed for EDF compliance.
	04/25/02	9.61		138.22	0.00				
	07/22/02	10.65		137.18	0.00				
	10/22/02	11.66		136.17	0.00				
	01/27/03	9.60		138.23	0.00				
	04/21/03	9.16		138.67	0.00				
	07/21/03	9.55		138.28	0.00				
	01/20/04	9.20		138.63	0.00				
	07/19/04	10.68		137.15	0.00				
	01/17/05	9.33		138.50	0.00				
MW-20	06/07/00	9.47	103.13 147.48 150.13	93.66	0.00	10-25	8-25	6-8	
	10/30/00	11.81		135.67	0.00				Top of casing elevation surveyed.
	2/15/0112	11.42		136.06	0.00				
	4/23/0113	---		---	---				
	07/23/01	12.37		135.11	0.00				
	10/23/01	13.45		134.03	0.00				
	01/21/02	9.68		140.45	0.00				Top of casing elevations were surveyed for EDF compliance.
	04/25/02	—		—	—				Well was inaccessible
	07/22/02	11.41		138.72	0.00				
	10/22/02	11.98		138.15	0.00				
	01/27/03	10.78		139.35	0.00				
	04/21/03	9.87		140.26	0.00				
	07/21/03	12.16		137.97	0.00				
	01/20/04	8.94		141.19	0.00				

Table 7. Water Level Data/Well Construction Details - Redwood Oil Bulk Plant, 455 Yolanda Ave. Santa Rosa, CA

Well ID	Sample Date	TOC (Ft, msl)	DTW (Ft)	GWE (Ft, msl)	Product (ft)	Screen Interval	Sand Pack Interval	Bentonite/ Grout Interval	Notes
MW-20	07/19/04	10.78	150.13	139.35	0.00	10-25	8-25	6-8	
	01/17/05	8.98		141.15	0.00				
V-1	06/13/91	21.89	102.53	80.64	0.00	15.5 - 25.5	13.5 - 25.5	0 - 13.5	
	07/09/91	21.91		80.62	0.00				
	08/01/91	21.34		81.19	0.00				
	08/29/91	21.10		81.43	0.00				
	09/11/91	21.25		81.28	0.00				
	10/08/91	22.88		79.65	0.00				
	11/08/91	22.15		80.38	0.00				
	12/11/91	---		---	---				
	01/13/92	21.28		81.25	0.00				
	02/11/92	18.75		83.78	0.00				
	03/11/92	13.54		88.99	0.00				
	04/13/92	14.52		88.01	0.00				
	05/15/92	15.18		87.35	0.00				
	06/15/92	16.29		86.24	0.00				
	07/16/92	17.22	102.53	85.31	0.00				
	08/18/92	17.08		85.45	0.00				
	09/18/92	18.25		84.28	0.00				
	12/08/92	17.80		84.73	0.00				
	03/10/93	15.59		86.94	0.00				
	06/04/93	14.97		87.56	0.00				
	10/14/93	14.66		87.87	0.00				
	04/11/94	14.00		88.53	0.00				
	10/19/94	13.92		88.61	0.00				
	04/11/95	9.28		93.25	0.00				
	03/06/96	9.72		92.81	0.00				
	10/14/96	11.91	102.51	90.60	0.00				Top of casing elevations were surveyed.
	04/09/97	10.48		92.03	0.00				
	10/29/97	13.96		88.57	0.02				
	04/07/98	8.01		94.50	0.00				
	10/07/98	11.10		91.41	0.00				
	04/07/99	8.15		94.36	0.00				

Table 7. Water Level Data/Well Construction Details - Redwood Oil Bulk Plant, 455 Yolanda Ave. Santa Rosa, CA

Well ID	Sample Date	TOC (Ft, msl)	DTW (Ft)	GWE (Ft, msl)	Product (ft)	Screen Interval	Sand Pack Interval	Bentonite/ Grout Interval	Notes
V-1	10/19/99	11.49	102.51	91.02	0.00	15.5 - 25.5	13.5 - 25.5	0 - 13.5	
	04/26/00	8.64		93.87	0.00				
	10/30/00	11.85		135.00	0.00				Top of casing elevations were surveyed.
	02/26/01	12.55		134.30	0.00				
	04/23/01	13.14		133.71	0.00				
	07/23/01	13.73		133.12	0.00				
	10/23/01	14.85		132.00	0.00				
	01/21/02	11.70	149.50	137.80	0.00				Top of casing elevations were surveyed for EDF compliance.
	04/25/02	11.65		137.85	0.00				
	07/22/02	12.52		136.98	0.00				
	10/22/02	12.90		136.60	0.00				
	01/27/03	11.43		138.07	0.00				
	04/21/03	11.44		138.06	0.00				
	07/21/03	12.08		137.42	0.00				
	01/20/04	10.54		138.96	0.00				
	07/19/04	11.92		137.58	0.00				
	01/17/05	10.21		139.29	0.00				
	07/12/05	9.96		139.54	0.00				
V-2	06/13/91	---	101.13	---	---	8 - 23	7 - 23	0 - 7	
	07/09/91	---		---	---				
	08/01/91	---		---	---				
	08/29/91	---		---	---				
	09/11/91	---		---	---				
	10/08/91	---		---	---				
	11/08/91	---		---	---				
	12/11/91	---		---	---				
	01/13/92	18.39		82.74	0.00				
	02/11/92	21.16		79.97	0.00				
	03/11/92	16.86		84.27	0.00				
	04/13/92	17.03		84.10	0.00				
	05/15/92	17.78		83.35	0.00				
	06/15/92	21.44		79.69	0.00				

Table 7. Water Level Data/Well Construction Details - Redwood Oil Bulk Plant, 455 Yolanda Ave. Santa Rosa, CA

Well ID	Sample Date	TOC (Ft, msl)	DTW (Ft)	GWE (Ft, msl)	Product (ft)	Screen Interval	Sand Pack Interval	Bentonite/ Grout Interval	Notes
V-2	07/16/92	---	101.13	---	---	8 - 23	7 - 23	0 - 7	
	08/18/92	---		---	---				
	09/18/92	---		---	---				
	12/08/92	19.41		81.72	0.00				
	03/10/93	13.62		87.51	0.00				
	06/04/93	12.98		88.15	0.00				
	10/14/93	---		---	---				
	04/11/94	20.11		81.02	0.00				
	10/19/94	---		---	---				
	04/11/95	12.14		88.99	0.00				
	03/06/96	13.01		88.12	0.00				
	10/14/96	16.04	100.82	84.78	0.00				
	04/09/97	13.46		87.36	0.00				
	10/29/97	17.24		83.58	0.00				
	04/07/98	8.01		94.50	0.00				
	10/07/98	13.68		87.14	0.00				
	04/07/99	10.56		90.26	0.00				
	10/19/99	13.96		86.86	0.00				
	04/26/00	9.31		91.51	0.00				
	10/30/00	11.75	143.85	132.10	0.00				Top of casing elevations were surveyed.
	02/26/01	10.36		133.49	0.00				
	04/23/01	15.10		128.75	0.00				
	08/22/01	15.48		128.37	0.00				Well has been switched to a SVE (soil vapor extraction) well.
DW-1	06/13/91	37.82	102.64	64.82	0.00	140 - 180	61 - 180	0 - 61	Well has been abandoned.
	07/09/91	37.82		64.82	0.00				
	08/01/91	92.26		10.38	0.00				
	08/29/91	50.13		52.51	0.00				
	09/11/91	39.72		62.92	0.00				
	10/08/91	39.31		63.33	0.00				
	11/09/91	38.90		63.74	0.00				
	12/11/91	39.96		62.68	0.00				
	12/08/92	37.75		64.89	0.00				

Table 7. Water Level Data/Well Construction Details - Redwood Oil Bulk Plant, 455 Yolanda Ave. Santa Rosa, CA

Well ID	Sample Date	TOC (Ft, msl)	DTW (Ft)	GWE (Ft, msl)	Product (ft)	Screen Interval	Sand Pack Interval	Bentonite/ Grout Interval	Notes
DW-1	03/10/93	32.60	102.64	70.04	0.00	140 - 180	61 - 180	0 - 61	
	06/04/93	32.35		70.29	0.00				
	10/14/93	---		---	---				
<hr/>									
DW-2	03/09/74	---	---	---	---	94 - 134	unknown	0 - 20	Well has been abandoned.
	10/17/95	---		---	---				
	10/21/96	---		---	---				
	04/10/97	---		---	---				
	10/30/97	---		---	---				
	04/08/98	---		---	---				
	10/07/98	---		---	---				
	04/07/99	---		---	---				
	08/30/99	23.23		---	0.48				

Table 7. Water Level Data/Well Construction Details - Redwood Oil Bulk Plant, 455 Yolanda Ave. Santa Rosa, CA

EXPLANATION:

DTW = Depth to water
ft =feet
msl = mean sea level
TOC = Top of casing elevation
GWE = Ground water elevation
— = **Not applicable**

APPENDIX C

CHAIN OF CUSTODY
AND
LABORATORY ANALYTICAL REPORTS

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.
Charlene Morrow, M.S.
Yelena Aravkina, M.S.
Bradley T. Benson, B.S.
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Seattle, WA 98119-2029
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February 14, 2006

Jim Green, Project Manager
ECM Group
P.O. Box 802
Benicia, CA 94510

Dear Mr. Green:

Included are the results from the testing of material submitted on January 27, 2006 from the Yolanda 98-507-14, F&BI 601226 project. There are 39 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

We appreciate this opportunity to be of service to you and hope you will call if you should have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.



Michael Erdahl
Project Manager

Enclosures
ECM0214R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on January 27, 2006 by Friedman & Bruya, Inc. from the ECM Group Yolanda 98-507-14, F&BI 601226 project. Samples were logged in under the laboratory ID's listed below.

<u>Laboratory ID</u>	<u>ECM Group</u>
601226-01	MW-1
601226-02	MW-2
601226-03	MW-3
601226-04	MW-4
601226-05	MW-7
601226-06	MW-9
601226-07	MW-10
601226-08	MW-21d25
601226-09	MW-21d75
601226-10	MW-21d145
601226-11	MW-21d180
601226-12	MW-22d25
601226-13	MW-22d75
601226-14	MW-22d145
601226-15	MW-22d165
601226-16	MW-23d25
601226-17	MW-23d75
601226-18	MW-23d145
601226-19	MW-23d180

All quality control requirements were acceptable.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 02/14/06

Date Received: 01/27/06

Project: Yolanda 98-507-14, F&BI 601226

Date Extracted: 01/30/06

Date Analyzed: 01/30/06 and 01/31/06

**RESULTS FROM THE ANALYSIS OF THE WATER SAMPLES
FOR TOTAL PETROLEUM HYDROCARBONS AS GASOLINE
USING EPA METHOD 8015M**

Results Reported as µg/L (ppb)

<u>Sample ID</u> Laboratory ID	<u>Gasoline Range</u> (C ₆ -C ₁₀)	Surrogate (% Recovery) (Limit 52-150)
MW-1 601226-01	<100	83
MW-2 601226-02	710	93
MW-3 d 601226-03	27,000	91
MW-4 601226-04	320	87
MW-7 601226-05	130	83
MW-9 601226-06	<100	80
MW-10 d 601226-07	29,000	94
MW-21d25 601226-08	160	85
MW-21d75 601226-09	1,100	91
MW-21d145 601226-10	280	89
MW-21d180 601226-11	150	81

d - The sample was diluted.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 02/14/06

Date Received: 01/27/06

Project: Yolanda 98-507-14, F&BI 601226

Date Extracted: 01/30/06

Date Analyzed: 01/30/06 and 01/31/06

**RESULTS FROM THE ANALYSIS OF THE WATER SAMPLES
FOR TOTAL PETROLEUM HYDROCARBONS AS GASOLINE
USING EPA METHOD 8015M**

Results Reported as µg/L (ppb)

<u>Sample ID</u> Laboratory ID	<u>Gasoline Range</u> (C ₆ -C ₁₀)	Surrogate <u>(% Recovery)</u> (Limit 52-150)
MW-22d25 601226-12	560	85
MW-22d75 601226-13	<100	84
MW-22d145 601226-14	<100	84
MW-22d165 601226-15	<100	85
MW-23d25 601226-16	<100	83
MW-23d75 601226-17	<100	85
MW-23d145 601226-18	<100	84
MW-23d180 601226-19	<100	83
Method Blank	<100	84

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 02/14/06

Date Received: 01/27/06

Project: Yolanda 98-507-14, F&BI 601226

Date Extracted: 01/30/06

Date Analyzed: 02/07/06 and 02/08/06

**RESULTS FROM THE ANALYSIS OF THE WATER SAMPLES
FOR TOTAL PETROLEUM HYDROCARBONS AS DIESEL
USING EPA METHOD 8015M**

**Sample Extracts Passed Through a
Silica Gel Column Prior to Analysis**

Results Reported as µg/L (ppb)

<u>Sample ID</u> Laboratory ID	<u>Diesel Range</u> (C ₁₀ -C ₂₅)	Surrogate <u>(% Recovery)</u> (Limit 51-132)
MW-1 601226-01	<50	115
MW-2 601226-02	160	94
MW-3 601226-03	25,000	118
MW-4 601226-04	60	112
MW-7 601226-05	<50	112
MW-9 601226-06	<50	118
MW-10 601226-07	9,600	116
MW-21d25 601226-08	<50	111
MW-21d75 601226-09	230	119
MW-21d145 601226-10	73	114
MW-21d180 601226-11	56	111

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 02/14/06

Date Received: 01/27/06

Project: Yolanda 98-507-14, F&BI 601226

Date Extracted: 01/30/06

Date Analyzed: 02/07/06 and 02/08/06

**RESULTS FROM THE ANALYSIS OF THE WATER SAMPLES
FOR TOTAL PETROLEUM HYDROCARBONS AS DIESEL
USING EPA METHOD 8015M**

**Sample Extracts Passed Through a
Silica Gel Column Prior to Analysis**

Results Reported as µg/L (ppb)

<u>Sample ID</u> Laboratory ID	<u>Diesel Range</u> (C ₁₀ -C ₂₅)	Surrogate <u>(% Recovery)</u> (Limit 51-132)
MW-22d25 601226-12	53	125
MW-22d75 601226-13	<50	124
MW-22d145 601226-14	<50	119
MW-22d165 601226-15	<50	125
MW-23d25 601226-16	69	104
MW-23d75 601226-17	<50	127
MW-23d145 601226-18	<50	126
MW-23d180 601226-19	<50	127
Method Blank	<50	107

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 02/14/06

Date Received: 01/27/06

Project: Yolanda 98-507-14, F&BI 601226

Date Extracted: 01/30/06

Date Analyzed: 02/07/06 and 02/08/06

**RESULTS FROM THE ANALYSIS OF THE WATER SAMPLES
FOR TOTAL PETROLEUM HYDROCARBONS AS
MOTOR OIL USING EPA METHOD 8015M**
**Sample Extracts Passed Through a
Silica Gel Column Prior to Analysis**
Results Reported as µg/L (ppb)

<u>Sample ID</u> Laboratory ID	<u>Motor Oil Range</u> (C ₂₅ -C ₃₆)	<u>Surrogate</u> <u>(% Recovery)</u> (Limit 51-132)
MW-1 601226-01	<250	115
MW-2 601226-02	<250	94
MW-3 601226-03	2,200	118
MW-4 601226-04	<250	112
MW-7 601226-05	<250	112
MW-9 601226-06	<250	118
MW-10 601226-07	370	116
MW-21d25 601226-08	<250	111
MW-21d75 601226-09	<250	119
MW-21d145 601226-10	<250	114
MW-21d180 601226-11	<250	111

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 02/14/06

Date Received: 01/27/06

Project: Yolanda 98-507-14, F&BI 601226

Date Extracted: 01/30/06

Date Analyzed: 02/07/06 and 02/08/06

**RESULTS FROM THE ANALYSIS OF THE WATER SAMPLES
FOR TOTAL PETROLEUM HYDROCARBONS AS DIESEL AND
MOTOR OIL USING EPA METHOD 8015M**

**Sample Extracts Passed Through a
Silica Gel Column Prior to Analysis**

Results Reported as µg/L (ppb)

<u>Sample ID</u> Laboratory ID	<u>Motor Oil Range</u> (C ₂₅ -C ₃₆)	Surrogate <u>(% Recovery)</u> (Limit 51-132)
MW-22d25 601226-12	<250	125
MW-22d75 601226-13	<250	124
MW-22d145 601226-14	<250	119
MW-22d165 601226-15	<250	125
MW-23d25 601226-16	250	104
MW-23d75 601226-17	<250	127
MW-23d145 601226-18	<250	126
MW-23d180 601226-19	<250	127
Method Blank	<250	107

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260B SIM

Client Sample ID:	MW-1	Client:	ECM Group
Date Received:	01/27/06	Project:	Yolanda 98-507-14, F&BI 601226
Date Extracted:	02/08/06	Lab ID:	601226-01
Date Analyzed:	02/08/06	Data File:	020805.D
Matrix:	water	Instrument:	GCMS5
Units:	ug/L (ppb)	Operator:	YA

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Dibromofluoromethane	84	75	141
1,2-Dichloroethane-d4	124	59	155
Toluene-d8	86	69	145

Compounds:	Concentration ug/L (ppb)
Ethanol	<1,000
t-Butyl alcohol (TBA)	<5
Methyl t-butyl ether (MTBE)	2.2
Ethyl t-butyl ether (ETBE)	<0.5
Diisopropyl ether (DIPE)	<0.5
t-Amyl methyl ether (TAME)	<0.5
Benzene	8.6
Toluene	5.4
Ethylbenzene	2.0
m,p-Xylene	5.6
o-Xylene	4.2
1,2-Dichloroethane (EDC)	<0.5
1,2-Dibromoethane (EDB)	<0.5

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260B SIM

Client Sample ID:	MW-2	Client:	ECM Group
Date Received:	01/27/06	Project:	Yolanda 98-507-14, F&BI 601226
Date Extracted:	02/08/06	Lab ID:	601226-02
Date Analyzed:	02/08/06	Data File:	020806.D
Matrix:	water	Instrument:	GCMS5
Units:	ug/L (ppb)	Operator:	YA

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Dibromofluoromethane	83	75	141
1,2-Dichloroethane-d4	118	59	155
Toluene-d8	95	69	145

Compounds:	Concentration ug/L (ppb)
Ethanol	<1,000
t-Butyl alcohol (TBA)	35
Methyl t-butyl ether (MTBE)	13
Ethyl t-butyl ether (ETBE)	<0.5
Diisopropyl ether (DIPE)	<0.5
t-Amyl methyl ether (TAME)	0.9
Benzene	21
Toluene	6.9
Ethylbenzene	18
m,p-Xylene	38
o-Xylene	5.5
1,2-Dichloroethane (EDC)	<0.5
1,2-Dibromoethane (EDB)	<0.5

FRIEDMAN & BRUYA, INC.**ENVIRONMENTAL CHEMISTS****Analysis For Volatile Compounds By EPA Method 8260B SIM**

Client Sample ID:	MW-3	Client:	ECM Group
Date Received:	01/27/06	Project:	Yolanda 98-507-14, F&BI 601226
Date Extracted:	02/09/06	Lab ID:	601226-03
Date Analyzed:	02/09/06	Data File:	020917.D
Matrix:	water	Instrument:	GCMS5
Units:	ug/L (ppb)	Operator:	YA

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Dibromofluoromethane	54 ip	75	141
1,2-Dichloroethane-d4	60	59	155
Toluene-d8	98	69	145

Compounds:	Concentration ug/L (ppb)
Ethanol	<1,000
t-Butyl alcohol (TBA)	980
Methyl t-butyl ether (MTBE)	3,500 ve
Ethyl t-butyl ether (ETBE)	2.2
Diisopropyl ether (DIPE)	<0.5
t-Amyl methyl ether (TAME)	420 ve
Benzene	1,700 ve
Toluene	95
Ethylbenzene	940 ve
m,p-Xylene	650 ve
o-Xylene	18
1,2-Dichloroethane (EDC)	<0.5
1,2-Dibromoethane (EDB)	<0.5

ve - The value reported exceeded the calibration range established for the analyte. The reported concentration is an estimate.

ip - Recovery fell outside of normal control limits. Compounds in the sample matrix interfered with the quantitation of the analyte.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260B SIM

Client Sample ID:	MW-3	Client:	ECM Group
Date Received:	01/27/06	Project:	Yolanda 98-507-14, F&BI 601226
Date Extracted:	02/09/06	Lab ID:	601226-03 1/200
Date Analyzed:	02/09/06	Data File:	020906.D
Matrix:	water	Instrument:	GCMS5
Units:	ug/L (ppb)	Operator:	YA

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Dibromofluoromethane	95	75	141
1,2-Dichloroethane-d4	139	59	155
Toluene-d8	110	69	145

Compounds:	Concentration ug/L (ppb)
Methyl t-butyl ether (MTBE)	22,000
t-Amyl methyl ether (TAME)	1,000
Benzene	6,500
Ethylbenzene	1,900
m,p-Xylene	910

Note: The sample was diluted due to the presence of high levels of material. Detection limits are raised due to dilution.

FRJEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260B SIM

Client Sample ID:	MW-4	Client:	ECM Group
Date Received:	01/27/06	Project:	Yolanda 98-507-14, F&BI 601226
Date Extracted:	02/08/06	Lab ID:	601226-04
Date Analyzed:	02/08/06	Data File:	020807.D
Matrix:	water	Instrument:	GCMS5
Units:	ug/L (ppb)	Operator:	YA

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Dibromofluoromethane	85	75	141
1,2-Dichloroethane-d4	124	59	155
Toluene-d8	90	69	145

Compounds:	Concentration ug/L (ppb)
Ethanol	<1,000
t-Butyl alcohol (TBA)	<5
Methyl t-butyl ether (MTBE)	3.3
Ethyl t-butyl ether (ETBE)	<0.5
Diisopropyl ether (DIPE)	<0.5
t-Amyl methyl ether (TAME)	<0.5
Benzene	54
Toluene	12
Ethylbenzene	14
m,p-Xylene	36
o-Xylene	8.4
1,2-Dichloroethane (EDC)	<0.5
1,2-Dibromoethane (EDB)	<0.5

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260B SIM

Client Sample ID:	MW-7	Client:	ECM Group
Date Received:	01/27/06	Project:	Yolanda 98-507-14, F&BI 601226
Date Extracted:	02/09/06	Lab ID:	601226-05
Date Analyzed:	02/09/06	Data File:	020913.D
Matrix:	water	Instrument:	GCMS5
Units:	ug/L (ppb)	Operator:	YA

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Dibromofluoromethane	80	75	141
1,2-Dichloroethane-d4	107	59	155
Toluene-d8	88	69	145

Compounds:	Concentration ug/L (ppb)
Ethanol	<1,000
t-Butyl alcohol (TBA)	<5
Methyl t-butyl ether (MTBE)	190
Ethyl t-butyl ether (ETBE)	<0.5
Diisopropyl ether (DIPE)	<0.5
t-Amyl methyl ether (TAME)	4.4
Benzene	16
Toluene	3.5
Ethylbenzene	4.8
m,p-Xylene	11
o-Xylene	2.2
1,2-Dichloroethane (EDC)	<0.5
1,2-Dibromoethane (EDB)	<0.5

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260B SIM

Client Sample ID:	MW-9	Client:	ECM Group
Date Received:	01/27/06	Project:	Yolanda 98-507-14, F&BI 601226
Date Extracted:	02/08/06	Lab ID:	601226-06
Date Analyzed:	02/08/06	Data File:	020808.D
Matrix:	water	Instrument:	GCMS5
Units:	ug/L (ppb)	Operator:	YA

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Dibromofluoromethane	83	75	141
1,2-Dichloroethane-d4	115	59	155
Toluene-d8	85	69	145

Compounds:	Concentration ug/L (ppb)
Ethanol	<1,000
t-Butyl alcohol (TBA)	<5
Methyl t-butyl ether (MTBE)	16
Ethyl t-butyl ether (ETBE)	<0.5
Diisopropyl ether (DIPE)	<0.5
t-Amyl methyl ether (TAME)	<0.5
Benzene	8.3
Toluene	5.5
Ethylbenzene	2.1
m,p-Xylene	5.8
o-Xylene	4.3
1,2-Dichloroethane (EDC)	<0.5
1,2-Dibromoethane (EDB)	<0.5

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260B SIM

Client Sample ID:	MW-10	Client:	ECM Group
Date Received:	01/27/06	Project:	Yolanda 98-507-14, F&BI 601226
Date Extracted:	02/09/06	Lab ID:	601226-07
Date Analyzed:	02/09/06	Data File:	020914.D
Matrix:	water	Instrument:	GCMS5
Units:	ug/L (ppb)	Operator:	YA

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Dibromofluoromethane	67 ip	75	141
1,2-Dichloroethane-d4	87	59	155
Toluene-d8	95	69	145

Compounds:	Concentration ug/L (ppb)
Ethanol	<1,000
t-Butyl alcohol (TBA)	1,100
Methyl t-butyl ether (MTBE)	820 ve
Ethyl t-butyl ether (ETBE)	<0.5
Diisopropyl ether (DIPE)	11
t-Amyl methyl ether (TAME)	61
Benzene	1,300 ve
Toluene	150
Ethylbenzene	730 ve
m,p-Xylene	1,600 ve
o-Xylene	120 ve
1,2-Dichloroethane (EDC)	<0.5
1,2-Dibromoethane (EDB)	<0.5

ve - The value reported exceeded the calibration range established for the analyte. The reported concentration is an estimate.

ip - Recovery fell outside of normal control limits. Compounds in the sample matrix interfered with the quantitation of the analyte.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260B SIM

Client Sample ID:	MW-10	Client:	ECM Group
Date Received:	01/27/06	Project:	Yolanda 98-507-14, F&BI 601226
Date Extracted:	02/09/06	Lab ID:	601226-07 1/100
Date Analyzed:	02/09/06	Data File:	020908.D
Matrix:	water	Instrument:	GCMS5
Units:	ug/L (ppb)	Operator:	YA

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Dibromofluoromethane	85	75	141
1,2-Dichloroethane-d4	119	59	155
Toluene-d8	97	69	145

Compounds:	Concentration ug/L (ppb)
Methyl t-butyl ether (MTBE)	1,400
Benzene	3,700
Ethylbenzene	1,600
m,p-Xylene	4,300
o-Xylene	110

Note: The sample was diluted due to the presence of high levels of material. Detection limits are raised due to dilution.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260B SIM

Client Sample ID:	MW-21d25	Client:	ECM Group
Date Received:	01/27/06	Project:	Yolanda 98-507-14, F&BI 601226
Date Extracted:	02/08/06	Lab ID:	601226-08
Date Analyzed:	02/08/06	Data File:	020809.D
Matrix:	water	Instrument:	GCMS5
Units:	ug/L (ppb)	Operator:	YA

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Dibromofluoromethane	84	75	141
1,2-Dichloroethane-d4	117	59	155
Toluene-d8	90	69	145

Compounds:	Concentration ug/L (ppb)
Ethanol	<1,000
t-Butyl alcohol (TBA)	<5
Methyl t-butyl ether (MTBE)	130
Ethyl t-butyl ether (ETBE)	<0.5
Diisopropyl ether (DIPE)	<0.5
t-Amyl methyl ether (TAME)	2.7
Benzene	30
Toluene	2.3
Ethylbenzene	2.8
m,p-Xylene	2.8
o-Xylene	2.6
1,2-Dichloroethane (EDC)	<0.5
1,2-Dibromoethane (EDB)	<0.5

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260B SIM

Client Sample ID:	MW-21d75	Client:	ECM Group
Date Received:	01/27/06	Project:	Yolanda 98-507-14, F&BI 601226
Date Extracted:	02/09/06	Lab ID:	601226-09
Date Analyzed:	02/09/06	Data File:	020918.D
Matrix:	water	Instrument:	GCMS5
Units:	ug/L (ppb)	Operator:	YA

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Dibromofluoromethane	56 ip	75	141
1,2-Dichloroethane-d4	69	59	155
Toluene-d8	85	69	145

Compounds:	Concentration ug/L (ppb)
Ethanol	<1,000
t-Butyl alcohol (TBA)	890
Methyl t-butyl ether (MTBE)	2,900 ve
Ethyl t-butyl ether (ETBE)	0.7
Diisopropyl ether (DIPE)	<0.5
t-Amyl methyl ether (TAME)	100
Benzene	120
Toluene	20
Ethylbenzene	43
m,p-Xylene	94
o-Xylene	13
1,2-Dichloroethane (EDC)	<0.5
1,2-Dibromoethane (EDB)	<0.5

ve - The value reported exceeded the calibration range established for the analyte. The reported concentration is an estimate.

ip - Recovery fell outside of normal control limits. Compounds in the sample matrix interfered with the quantitation of the analyte.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260B SIM

Client Sample ID:	MW-21d75	Client:	ECM Group
Date Received:	01/27/06	Project:	Yolanda 98-507-14, F&BI 601226
Date Extracted:	02/09/06	Lab ID:	601226-09 1/200
Date Analyzed:	02/09/06	Data File:	020909.D
Matrix:	water	Instrument:	GCMS5
Units:	ug/L (ppb)	Operator:	YA

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Dibromofluoromethane	85	75	141
1,2-Dichloroethane-d4	124	59	155
Toluene-d8	95	69	145

Compounds:	Concentration ug/L (ppb)
Methyl t-butyl ether (MTBE)	12,000

Note: The sample was diluted due to the presence of high levels of material. Detection limits are raised due to dilution.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260B SIM

Client Sample ID:	MW-21d145	Client:	ECM Group
Date Received:	01/27/06	Project:	Yolanda 98-507-14, F&BI 601226
Date Extracted:	02/09/06	Lab ID:	601226-10
Date Analyzed:	02/09/06	Data File:	020915.D
Matrix:	water	Instrument:	GCMS5
Units:	ug/L (ppb)	Operator:	YA

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Dibromofluoromethane	82	75	141
1,2-Dichloroethane-d4	93	59	155
Toluene-d8	100	69	145

Compounds:	Concentration ug/L (ppb)
Ethanol	<1,000
t-Butyl alcohol (TBA)	32
Methyl t-butyl ether (MTBE)	280 ve
Ethyl t-butyl ether (ETBE)	<0.5
Diisopropyl ether (DIPE)	<0.5
t-Amyl methyl ether (TAME)	8.7
Benzene	36
Toluene	14
Ethylbenzene	15
m,p-Xylene	36
o-Xylene	21
1,2-Dichloroethane (EDC)	<0.5
1,2-Dibromoethane (EDB)	<0.5

ve - The value reported exceeded the calibration range established for the analyte. The reported concentration is an estimate.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260B SIM

Client Sample ID:	MW-21d145	Client:	ECM Group
Date Received:	01/27/06	Project:	Yolanda 98-507-14, F&BI 601226
Date Extracted:	02/09/06	Lab ID:	601226-10 1/10
Date Analyzed:	02/09/06	Data File:	020910.D
Matrix:	water	Instrument:	GCMS5
Units:	ug/L (ppb)	Operator:	YA

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Dibromofluoromethane	87	75	141
1,2-Dichloroethane-d4	120	59	155
Toluene-d8	95	69	145

Compounds:	Concentration ug/L (ppb)
Methyl t-butyl ether (MTBE)	400

Note: The sample was diluted due to the presence of high levels of material. Detection limits are raised due to dilution.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260B SIM

Client Sample ID:	MW-21d180	Client:	ECM Group
Date Received:	01/27/06	Project:	Yolanda 98-507-14, F&BI 601226
Date Extracted:	02/09/06	Lab ID:	601226-11
Date Analyzed:	02/09/06	Data File:	020916.D
Matrix:	water	Instrument:	GCMS5
Units:	ug/L (ppb)	Operator:	YA

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Dibromofluoromethane	68 ip	75	141
1,2-Dichloroethane-d4	78	59	155
Toluene-d8	84	69	145

Compounds:	Concentration ug/L (ppb)
Ethanol	<1,000
t-Butyl alcohol (TBA)	30
Methyl t-butyl ether (MTBE)	290 ve
Ethyl t-butyl ether (ETBE)	<0.5
Diisopropyl ether (DIPE)	<0.5
t-Amyl methyl ether (TAME)	6.8
Benzene	15
Toluene	6.1
Ethylbenzene	6.9
m,p-Xylene	17
o-Xylene	7.9
1,2-Dichloroethane (EDC)	<0.5
1,2-Dibromoethane (EDB)	<0.5

ve - The value reported exceeded the calibration range established for the analyte. The reported concentration is an estimate.

ip - Recovery fell outside of normal control limits. Compounds in the sample matrix interfered with the quantitation of the analyte.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260B SIM

Client Sample ID:	MW-21d180	Client:	ECM Group
Date Received:	01/27/06	Project:	Yolanda 98-507-14, F&BI 601226
Date Extracted:	02/09/06	Lab ID:	601226-11 1/10
Date Analyzed:	02/09/06	Data File:	020911.D
Matrix:	water	Instrument:	GCMS5
Units:	ug/L (ppb)	Operator:	YA

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Dibromofluoromethane	82	75	141
1,2-Dichloroethane-d4	117	59	155
Toluene-d8	88	69	145

Compounds:	Concentration ug/L (ppb)
Methyl t-butyl ether (MTBE)	550

Note: The sample was diluted due to the presence of high levels of material. Detection limits are raised due to dilution.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260B SIM

Client Sample ID:	MW-22d25	Client:	ECM Group
Date Received:	01/27/06	Project:	Yolanda 98-507-14, F&BI 601226
Date Extracted:	02/09/06	Lab ID:	601226-12
Date Analyzed:	02/09/06	Data File:	020919.D
Matrix:	water	Instrument:	GCMS5
Units:	ug/L (ppb)	Operator:	YA

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Dibromofluoromethane	57 ip	75	141
1,2-Dichloroethane-d4	65	59	155
Toluene-d8	88	69	145

Compounds:	Concentration ug/L (ppb)
Ethanol	<1,000
t-Butyl alcohol (TBA)	160
Methyl t-butyl ether (MTBE)	2,800 ve
Ethyl t-butyl ether (ETBE)	<0.5
Diisopropyl ether (DIPE)	<0.5
t-Amyl methyl ether (TAME)	170
Benzene	1.3
Toluene	<0.5
Ethylbenzene	1.1
m,p-Xylene	1.2
o-Xylene	<1
1,2-Dichloroethane (EDC)	0.5
1,2-Dibromoethane (EDB)	<0.5

ve - The value reported exceeded the calibration range established for the analyte. The reported concentration is an estimate.

ip - Recovery fell outside of normal control limits. Compounds in the sample matrix interfered with the quantitation of the analyte.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260B SIM

Client Sample ID:	MW-22d25	Client:	ECM Group
Date Received:	01/27/06	Project:	Yolanda 98-507-14, F&BI 601226
Date Extracted:	02/09/06	Lab ID:	601226-12 1/200
Date Analyzed:	02/09/06	Data File:	020912.D
Matrix:	water	Instrument:	GCMS5
Units:	ug/L (ppb)	Operator:	YA

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Dibromofluoromethane	87	75	141
1,2-Dichloroethane-d4	119	59	155
Toluene-d8	93	69	145

Compounds:	Concentration ug/L (ppb)
Methyl t-butyl ether (MTBE)	11,000

Note: The sample was diluted due to the presence of high levels of material. Detection limits are raised due to dilution.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260B SIM

Client Sample ID:	MW-22d75	Client:	ECM Group
Date Received:	01/27/06	Project:	Yolanda 98-507-14, F&BI 601226
Date Extracted:	02/08/06	Lab ID:	601226-13
Date Analyzed:	02/08/06	Data File:	020810.D
Matrix:	water	Instrument:	GCMS5
Units:	ug/L (ppb)	Operator:	YA

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Dibromofluoromethane	81	75	141
1,2-Dichloroethane-d4	111	59	155
Toluene-d8	83	69	145

Compounds:	Concentration ug/L (ppb)
Ethanol	<1,000
t-Butyl alcohol (TBA)	<5
Methyl t-butyl ether (MTBE)	75
Ethyl t-butyl ether (ETBE)	<0.5
Diisopropyl ether (DIPE)	<0.5
t-Amyl methyl ether (TAME)	4.5
Benzene	<0.5
Toluene	<0.5
Ethylbenzene	<0.5
m,p-Xylene	<1
o-Xylene	<0.5
1,2-Dichloroethane (EDC)	<0.5
1,2-Dibromoethane (EDB)	<0.5

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260B SIM

Client Sample ID:	MW-22d145	Client:	ECM Group
Date Received:	01/27/06	Project:	Yolanda 98-507-14, F&BI 601226
Date Extracted:	02/08/06	Lab ID:	601226-14
Date Analyzed:	02/08/06	Data File:	020811.D
Matrix:	water	Instrument:	GCMS5
Units:	ug/L (ppb)	Operator:	YA

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Dibromofluoromethane	85	75	141
1,2-Dichloroethane-d4	117	59	155
Toluene-d8	86	69	145

Compounds:	Concentration ug/L (ppb)
Ethanol	<1,000
t-Butyl alcohol (TBA)	<5
Methyl t-butyl ether (MTBE)	13
Ethyl t-butyl ether (ETBE)	<0.5
Diisopropyl ether (DIPE)	<0.5
t-Amyl methyl ether (TAME)	0.9
Benzene	<0.5
Toluene	<0.5
Ethylbenzene	<0.5
m,p-Xylene	<1
o-Xylene	<0.5
1,2-Dichloroethane (EDC)	<0.5
1,2-Dibromoethane (EDB)	<0.5

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260B SIM

Client Sample ID:	MW-22d165	Client:	ECM Group
Date Received:	01/27/06	Project:	Yolanda 98-507-14, F&BI 601226
Date Extracted:	02/08/06	Lab ID:	601226-15
Date Analyzed:	02/08/06	Data File:	020812.D
Matrix:	water	Instrument:	GCMS5
Units:	ug/L (ppb)	Operator:	YA

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Dibromofluoromethane	85	75	141
1,2-Dichloroethane-d4	122	59	155
Toluene-d8	85	69	145

Compounds:	Concentration ug/L (ppb)
Ethanol	<1,000
t-Butyl alcohol (TBA)	<5
Methyl t-butyl ether (MTBE)	16
Ethyl t-butyl ether (ETBE)	<0.5
Diisopropyl ether (DIPE)	<0.5
t-Amyl methyl ether (TAME)	1.0
Benzene	<0.5
Toluene	<0.5
Ethylbenzene	<0.5
m,p-Xylene	<1
o-Xylene	<0.5
1,2-Dichloroethane (EDC)	<0.5
1,2-Dibromoethane (EDB)	<0.5

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260B SIM

Client Sample ID:	MW-23d25	Client:	ECM Group
Date Received:	01/27/06	Project:	Yolanda 98-507-14, F&BI 601226
Date Extracted:	02/08/06	Lab ID:	601226-16
Date Analyzed:	02/08/06	Data File:	020813.D
Matrix:	water	Instrument:	GCMS5
Units:	ug/L (ppb)	Operator:	YA

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Dibromofluoromethane	82	75	141
1,2-Dichloroethane-d4	107	59	155
Toluene-d8	91	69	145

Compounds:	Concentration ug/L (ppb)
Ethanol	<1,000
t-Butyl alcohol (TBA)	<5
Methyl t-butyl ether (MTBE)	26
Ethyl t-butyl ether (ETBE)	<0.5
Diisopropyl ether (DIPE)	<0.5
t-Amyl methyl ether (TAME)	1.0
Benzene	<0.5
Toluene	<0.5
Ethylbenzene	<0.5
m,p-Xylene	<1
o-Xylene	<0.5
1,2-Dichloroethane (EDC)	<0.5
1,2-Dibromoethane (EDB)	<0.5

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260B SIM

Client Sample ID:	MW-23d75	Client:	ECM Group
Date Received:	01/27/06	Project:	Yolanda 98-507-14, F&BI 601226
Date Extracted:	02/08/06	Lab ID:	601226-17
Date Analyzed:	02/08/06	Data File:	020814.D
Matrix:	water	Instrument:	GCMS5
Units:	ug/L (ppb)	Operator:	YA

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Dibromofluoromethane	83	75	141
1,2-Dichloroethane-d4	106	59	155
Toluene-d8	84	69	145

Compounds:	Concentration ug/L (ppb)
Ethanol	<1,000
t-Butyl alcohol (TBA)	<5
Methyl t-butyl ether (MTBE)	60
Ethyl t-butyl ether (ETBE)	<0.5
Diisopropyl ether (DIPE)	<0.5
t-Amyl methyl ether (TAME)	1.0
Benzene	<0.5
Toluene	<0.5
Ethylbenzene	<0.5
m,p-Xylene	<1
o-Xylene	<0.5
1,2-Dichloroethane (EDC)	<0.5
1,2-Dibromoethane (EDB)	<0.5

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260B SIM

Client Sample ID:	MW-23d145	Client:	ECM Group
Date Received:	01/27/06	Project:	Yolanda 98-507-14, F&BI 601226
Date Extracted:	02/08/06	Lab ID:	601226-18
Date Analyzed:	02/08/06	Data File:	020815.D
Matrix:	water	Instrument:	GCMS5
Units:	ug/L (ppb)	Operator:	YA

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Dibromofluoromethane	94	75	141
1,2-Dichloroethane-d4	110	59	155
Toluene-d8	98	69	145

Compounds:	Concentration ug/L (ppb)
Ethanol	<1,000
t-Butyl alcohol (TBA)	<5
Methyl t-butyl ether (MTBE)	3.8
Ethyl t-butyl ether (ETBE)	<0.5
Diisopropyl ether (DIPE)	<0.5
t-Amyl methyl ether (TAME)	<0.5
Benzene	<0.5
Toluene	0.6
Ethylbenzene	<0.5
m,p-Xylene	<1
o-Xylene	<0.5
1,2-Dichloroethane (EDC)	<0.5
1,2-Dibromoethane (EDB)	<0.5

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260B SIM

Client Sample ID:	MW-23d180	Client:	ECM Group
Date Received:	01/27/06	Project:	Yolanda 98-507-14, F&BI 601226
Date Extracted:	02/08/06	Lab ID:	601226-19
Date Analyzed:	02/08/06	Data File:	020816.D
Matrix:	water	Instrument:	GCMS5
Units:	ug/L (ppb)	Operator:	YA

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Dibromofluoromethane	89	75	141
1,2-Dichloroethane-d4	105	59	155
Toluene-d8	89	69	145

Compounds:	Concentration ug/L (ppb)
Ethanol	<1,000
t-Butyl alcohol (TBA)	<5
Methyl t-butyl ether (MTBE)	1.3
Ethyl t-butyl ether (ETBE)	<0.5
Diisopropyl ether (DIPE)	<0.5
t-Amyl methyl ether (TAME)	<0.5
Benzene	<0.5
Toluene	<0.5
Ethylbenzene	<0.5
m,p-Xylene	<1
o-Xylene	<0.5
1,2-Dichloroethane (EDC)	<0.5
1,2-Dibromoethane (EDB)	<0.5

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260B SIM

Client Sample ID:	Method Blank	Client:	ECM Group
Date Received:	Not Applicable	Project:	Yolanda 98-507-14, F&BI 601226
Date Extracted:	02/08/06	Lab ID:	06-273 mb
Date Analyzed:	02/08/06	Data File:	020804.D
Matrix:	water	Instrument:	GCMS5
Units:	ug/L (ppb)	Operator:	YA

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Dibromofluoromethane	85	75	141
1,2-Dichloroethane-d4	128	59	155
Toluene-d8	97	69	145

Compounds:	Concentration ug/L (ppb)
------------	-----------------------------

Ethanol	<1,000
t-Butyl alcohol (TBA)	<5
Methyl t-butyl ether (MTBE)	<0.5
Ethyl t-butyl ether (ETBE)	<0.5
Diisopropyl ether (DIPE)	<0.5
t-Amyl methyl ether (TAME)	<0.5
Benzene	<0.5
Toluene	<0.5
Ethylbenzene	<0.5
m,p-Xylene	<1
o-Xylene	<0.5
1,2-Dichloroethane (EDC)	<0.5
1,2-Dibromoethane (EDB)	<0.5

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260B SIM

Client Sample ID:	Method Blank	Client:	ECM Group
Date Received:	Not Applicable	Project:	Yolanda 98-507-14, F&BI 601226
Date Extracted:	02/09/06	Lab ID:	06-276 mb
Date Analyzed:	02/09/06	Data File:	020905.D
Matrix:	water	Instrument:	GCMS5
Units:	ug/L (ppb)	Operator:	YA

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Dibromofluoromethane	81	75	141
1,2-Dichloroethane-d4	110	59	155
Toluene-d8	91	69	145

Compounds:	Concentration ug/L (ppb)
Ethanol	<1,000
t-Butyl alcohol (TBA)	<5
Methyl t-butyl ether (MTBE)	<0.5
Ethyl t-butyl ether (ETBE)	<0.5
Diisopropyl ether (DIPE)	<0.5
t-Amyl methyl ether (TAME)	<0.5
Benzene	<0.5
Toluene	<0.5
Ethylbenzene	<0.5
m,p-Xylene	<1
o-Xylene	<0.5
1,2-Dichloroethane (EDC)	<0.5
1,2-Dibromoethane (EDB)	<0.5

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 02/14/06

Date Received: 01/27/06

Project: Yolanda 98-507-14, F&BI 601226

**QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF WATER
SAMPLES FOR TOTAL PETROLEUM HYDROCARBONS AS GASOLINE
USING EPA METHOD 8015M**

Laboratory Code: 601226-19 (Duplicate)

Analyte	Reporting Units	Sample Result	Duplicate Result	Relative Percent Difference (Limit 20)
Gasoline	µg/L (ppb)	<100	<100	nm

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Gasoline	µg/L (ppb)	1,000	90	91	63-129	1

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 02/14/06

Date Received: 01/27/06

Project: Yolanda 98-507-14, F&BI 601226

**QUALITY ASSURANCE RESULTS FROM THE ANALYSIS
OF WATER SAMPLES
FOR TOTAL PETROLEUM HYDROCARBONS AS DIESEL
USING EPA METHOD 8015M**

Laboratory Code	Laboratory Control Sample	Silica Gel	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Analyte	Reporting Units	Spike Level				
Diesel	µg/L (ppb)	2,500	132	119	74-139	10

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 02/14/06

Date Received: 01/27/06

Project: Yolanda 98-507-14, F&BI 601226

**QUALITY ASSURANCE RESULTS FROM THE ANALYSIS
OF WATER SAMPLES
FOR TOTAL PETROLEUM HYDROCARBONS AS MOTOR OIL
USING EPA METHOD 8015M**

Laboratory Code: Laboratory Control Sample Silica Gel

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Motor Oil	µg/L (ppb)	2,500	95	86	70-130	10

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 02/14/06

Date Received: 01/27/06

Project: Yolanda 98-507-14, F&BI 601226

**QUALITY ASSURANCE RESULTS FOR THE ANALYSIS
OF WATER SAMPLES FOR VOLATILES BY EPA METHOD 8260B SIM**

Laboratory Code: 601226-19 (Duplicate)

Analyte	Reporting Units	Sample Result	Duplicate Result	Relative Percent Difference (Limit 20)
Ethanol	µg/L (ppb)	<1,000	<1,000	nm
t-Butyl alcohol (TBA)	µg/L (ppb)	<5	<5	nm
Methyl t-butyl ether (MTBE)	µg/L (ppb)	<0.5	<0.5	nm
Diisopropyl ether (DIPE)	µg/L (ppb)	<0.5	<0.5	nm
Ethyl t-butyl ether (ETBE)	µg/L (ppb)	<0.5	<0.5	nm
t-Amyl methyl ether (TAME)	µg/L (ppb)	<0.5	<0.5	nm
Benzene	µg/L (ppb)	<0.5	<0.5	nm
Toluene	µg/L (ppb)	<0.5	<0.5	nm
Ethylbenzene	µg/L (ppb)	<0.5	<0.5	nm
m,p-Xylene	µg/L (ppb)	<1	<1	nm
1,2-Dichloroethane (EDC)	µg/L (ppb)	<0.5	<0.5	nm
1,2-Dibromoethane (EDB)	µg/L (ppb)	<0.5	<0.5	nm

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Ethanol	µg/L (ppb)	500	89	55-151
t-Butyl alcohol (TBA)	µg/L (ppb)	50	93	49-144
Methyl t-butyl ether (MTBE)	µg/L (ppb)	10	90	69-126
Diisopropyl ether (DIPE)	µg/L (ppb)	10	89	68-138
Ethyl t-butyl ether (ETBE)	µg/L (ppb)	10	94	69-131
t-Amyl methyl ether (TAME)	µg/L (ppb)	10	92	70-127
Benzene	µg/L (ppb)	20	91	66-127
Toluene	µg/L (ppb)	20	95	67-133
Ethylbenzene	µg/L (ppb)	10	94	70-130
m,p-Xylene	µg/L (ppb)	10	101	70-130

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 02/14/06

Date Received: 01/27/06

Project: Yolanda 98-507-14, F&BI 601226

**QUALITY ASSURANCE RESULTS FOR THE ANALYSIS
OF WATER SAMPLES FOR VOLATILES BY EPA METHOD 8260B SIM**

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Ethanol	µg/L (ppb)	500	68	66	55-151	3
t-Butyl alcohol (TBA)	µg/L (ppb)	50	80	79	49-144	2
Methyl t-butyl ether (MTBE)	µg/L (ppb)	10	82	80	69-126	3
Diisopropyl ether (DIPE)	µg/L (ppb)	10	87	82	68-138	6
Ethyl t-butyl ether (ETBE)	µg/L (ppb)	10	90	88	69-131	3
t-Amyl methyl ether (TAME)	µg/L (ppb)	10	86	84	70-127	3
Benzene	µg/L (ppb)	20	92	88	66-127	4
Toluene	µg/L (ppb)	20	96	91	67-133	5
Ethylbenzene	µg/L (ppb)	10	95	92	70-130	3
m,p-Xylene	µg/L (ppb)	10	102	98	70-130	4

Note: The calibration verification result associated with samples that were analyzed on 02/09/06 for ethanol, m-xylene exceeded 15% deviation. The average deviation for all compounds was less than 15%, therefore the initial calibration is considered valid.

601226

SAMPLE CHAIN OF CUSTODY ME 01-27-06

15/308

Send Report To JM GREENCompany ECM GroupAddress PO Box 802City, State, ZIP Benicia, CA 94510Phone # (707) 751-0655 Fax # (707) 751-0653

SAMPLERS (signature)

PROJECT NAME/NO.

YOKANOA
98-507-14

PO #

REMARKS

SUBMIT AS EDF

Page # 1 of 1

TURNAROUND TIME

 Standard (2 Weeks) RUSH

Rush charges authorized by:

SAMPLE DISPOSAL

 Dispose after 30 days Return samples Will call with instructions

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of containers	ANALYSES REQUESTED					Notes
						TPH-Diesel	TPH-Gasoline	BTEX by 8260B	Fuel Oxygenates	Lead Scavengers	
MW-1	01 A-F	1/24/06	13:00	W	6	X	X	X	X	X	(X)
MW-2	02 A-F	1/24/06	12:40	W	6	X	X	X	X	X	(X)
MW-3	03 A-F	1/23/06	11:45	W	6	X	X	X	X	X	(X)
MW-4	04 A-F	1/23/06	10:55	W	6	X	X	X	X	X	(X)
MW-7	05 A-F	1/23/06	11:20	W	6	X	X	X	X	X	(X)
MW-9	06 A-F	1/24/06	13:20	W	6	X	X	X	X	X	(X)
MW-10	07 A-F	1/23/06	10:40	W	6	X	X	X	X	X	(X)
MW-21 d 25	08 A-E	1/23/06	12:30	W	6	X	X	X	X	X	(X)
MW-21 d 75	09 A-F	1/23/06	12:40	W	6	X	X	X	X	X	(X)
MW-21 d 145	10 A-E	1/23/06	12:50	N	6	X	X	X	X	X	(X)

Friedman & Bruya, Inc.

3012 16th Avenue West

Seattle, WA 98119-2029

Ph. (206) 285-8282

Fax (206) 283-5044

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: <i>[Signature]</i>	MICHAEL S. JACKSON	ECM GROUP	1/25/06	
Received by: <i>[Signature]</i>	Nhan Pham	FBT	1/26/06	09:30
Relinquished by: <i>[Signature]</i>				
Received by: <i>[Signature]</i>				

601226

SAMPLE CHAIN OF CUSTODY ME 01-27-06

Send Report To JIM GREENCompany ECM GroupAddress PO Box 802City, State, ZIP Benicia, CA 94510Phone # (707) 751-0655 Fax # (707) 751-0653

SAMPLERS (signature)

PROJECT NAME/NO.

YOLANDA
98-507-14

PO #

REMARKS

SUBMIT AS EDF

Page # 2 of 2

TURNAROUND TIME

 Standard (2 Weeks) RUSH

Rush charges authorized by:

SAMPLE DISPOSAL

 Dispose after 30 days Return samples Will call with instructions

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of containers	ANALYSES REQUESTED							Notes	
						TPH-Diesel	TPH-Gasoline	BTEX by 8260B	Fuel Oxygenates	Lead Scavengers	Motor-Oil	Permeate Enrich	V2106	
MW-21 d 180	11 A-F	1/23/06	13:05	W	6	X	X	X	X	X	X	X	X	
MW-22 d 25	12 A-F	1/24/06	14:00	W	6	X	X	X	X	X	X	X	X	
MW-22 d 75	13 A-F	1/24/06	14:10	W	6	X	X	X	X	X	X	X	X	
MW-22 d 145	14 A-F	1/24/06	14:25	W	6	X	X	X	X	X	X	X	X	
MW-22 d 165	15 A-F	1/24/06	14:35	W	6	X	X	X	X	X	X	X	X	
MW-23 d 25	16 A-F	1/24/06	15:15	W	6	X	X	X	X	X	X	X	X	
MW-23 d 75	17 A-F	1/24/06	15:20	W	6	X	X	X	X	X	X	X	X	
MW-23 d 145	18 A-F	1/24/06	15:40	W	6	X	X	X	X	X	X	X	X	
MW-23 d 180	19 A-F	1/24/06	15:55	W	6	X	X	X	X	X	X	X	X	

Friedman & Bruya, Inc.
3012 16th Avenue West

Seattle, WA 98119-2029

Ph. (206) 285-8282

Fax (206) 283-5044

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: <i>[Signature]</i>	MICHAEL S. JACKSON	ECM GROUP	1/25/06	
Received by: <i>[Signature]</i>	Nhan Pham	Fe BI	1/26/06	09:30
Relinquished by: <i>[Signature]</i>				
Received by: <i>[Signature]</i>				

V5/
B05

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.
Charlene Morrow, M.S.
Yelena Aravkina, M.S.
Bradley T. Benson, B.S.
Kurt Johnson, B.S.

3012 16th Avenue West
Seattle, WA 98119-2029
TEL: (206) 285-8282
FAX: (206) 283-5044
e-mail: fbi@isomedia.com

February 16, 2006

Jim Green, Project Manager
ECM Group
P.O. Box 802
Benicia, CA 94510

Dear Mr. Green:

Included are the results from the testing of material submitted on February 9, 2006 from the 98-507-14 Yolanda, F&BI 602084 project. There are 14 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

We appreciate this opportunity to be of service to you and hope you will call if you should have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.



Michael Erdahl
Project Manager

Enclosures
ECM0216R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on February 9, 2006 by Friedman & Bruya, Inc. from the ECM Group 98-507-14 Yolanda, F&BI 602084 project. Samples were logged in under the laboratory ID's listed below.

<u>Laboratory ID</u>	<u>ECM Group</u>
602084-01	MW-26d25
602084-02	MW-26d75
602084-03	MW-26d145
602084-04	MW-26d180
602084-05	MW-27d25
602084-06	MW-27d75
602084-07	MW-27d145
602084-08	MW-27d180
602084-09	MW-27d230

A surrogate recovery was outside of established acceptance criteria for sample MW-27d180 and MW-27d230. Associated analytes are flagged as estimates. Samples were not reanalyzed due to insufficient hold time. All other quality control requirements were acceptable.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 02/16/06

Date Received: 02/09/06

Project: 98-507-14 Yolanda, F&BI 602084

Date Extracted: 02/14/06

Date Analyzed: 02/14/06 and 02/15/06

**RESULTS FROM THE ANALYSIS OF THE WATER SAMPLES
FOR TOTAL PETROLEUM HYDROCARBONS AS GASOLINE
USING EPA METHOD 8015M**
Results Reported as µg/L (ppb)

<u>Sample ID</u> Laboratory ID	<u>Gasoline Range</u> (C ₆ -C ₁₀)	<u>Surrogate</u> <u>(% Recovery)</u> (Limit 52-150)
MW-27d25 602084-05	<100	72
MW-27d75 602084-06	<100	67
MW-27d145 602084-07	<100	67
MW-27d180 602084-08	<100	73
MW-27d230 602084-09	<100	71
Method Blank	<100	71

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260B SIM

Client Sample ID:	MW-26d25	Client:	ECM Group
Date Received:	02/09/06	Project:	98-507-14 Yolanda, F&BI 602084
Date Extracted:	02/10/06	Lab ID:	602084-01
Date Analyzed:	02/10/06	Data File:	021007.D
Matrix:	water	Instrument:	GCMS5
Units:	ug/L (ppb)	Operator:	YA

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Dibromofluoromethane	88	75	141
1,2-Dichloroethane-d4	116	59	155
Toluene-d8	94	69	145

Compounds:	Concentration ug/L (ppb)
Ethanol	<1,000
t-Butyl alcohol (TBA)	<5
Methyl t-butyl ether (MTBE)	<0.5
Ethyl t-butyl ether (ETBE)	<0.5
Diisopropyl ether (DIPE)	<0.5
t-Amyl methyl ether (TAME)	<0.5
1,2-Dichloroethane (EDC)	<0.5
1,2-Dibromoethane (EDB)	<0.5

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260B SIM

Client Sample ID:	MW-26d75	Client:	ECM Group
Date Received:	02/09/06	Project:	98-507-14 Yolanda, F&BI 602084
Date Extracted:	02/10/06	Lab ID:	602084-02
Date Analyzed:	02/10/06	Data File:	021008.D
Matrix:	water	Instrument:	GCMS5
Units:	ug/L (ppb)	Operator:	YA

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Dibromofluoromethane	88	75	141
1,2-Dichloroethane-d4	118	59	155
Toluene-d8	93	69	145

Compounds:	Concentration ug/L (ppb)
Ethanol	<1,000
t-Butyl alcohol (TBA)	23
Methyl t-butyl ether (MTBE)	<0.5
Ethyl t-butyl ether (ETBE)	<0.5
Diisopropyl ether (DIPE)	<0.5
t-Amyl methyl ether (TAME)	<0.5
1,2-Dichloroethane (EDC)	<0.5
1,2-Dibromoethane (EDB)	<0.5

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260B SIM

Client Sample ID:	MW-26d145	Client:	ECM Group
Date Received:	02/09/06	Project:	98-507-14 Yolanda, F&BI 602084
Date Extracted:	02/10/06	Lab ID:	602084-03
Date Analyzed:	02/10/06	Data File:	021009.D
Matrix:	water	Instrument:	GCMS5
Units:	ug/L (ppb)	Operator:	YA

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Dibromofluoromethane	88	75	141
1,2-Dichloroethane-d4	115	59	155
Toluene-d8	95	69	145

Compounds:	Concentration ug/L (ppb)
Ethanol	<1,000
t-Butyl alcohol (TBA)	23
Methyl t-butyl ether (MTBE)	<0.5
Ethyl t-butyl ether (ETBE)	<0.5
Diisopropyl ether (DIPE)	<0.5
t-Amyl methyl ether (TAME)	<0.5
1,2-Dichloroethane (EDC)	<0.5
1,2-Dibromoethane (EDB)	<0.5

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS
FRIEDMAN & BRUYA, INC.

Analysis For Volatile Compounds By EPA Method 8260B SIM

Client Sample ID:	MW-26d180	Client:	ECM Group
Date Received:	02/09/06	Project:	98-507-14 Yolanda, F&BI 602084
Date Extracted:	02/10/06	Lab ID:	602084-04
Date Analyzed:	02/10/06	Data File:	021010.D
Matrix:	water	Instrument:	GCMS5
Units:	ug/L (ppb)	Operator:	YA

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Dibromofluoromethane	91	75	141
1,2-Dichloroethane-d4	108	59	155
Toluene-d8	98	69	145

Compounds:	Concentration ug/L (ppb)
Ethanol	<1,000
t-Butyl alcohol (TBA)	24
Methyl t-butyl ether (MTBE)	<0.5
Ethyl t-butyl ether (ETBE)	<0.5
Diisopropyl ether (DIPE)	<0.5
t-Amyl methyl ether (TAME)	<0.5
1,2-Dichloroethane (EDC)	<0.5
1,2-Dibromoethane (EDB)	<0.5

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260B SIM

Client Sample ID:	MW-27d25	Client:	ECM Group
Date Received:	02/09/06	Project:	98-507-14 Yolanda, F&BI 602084
Date Extracted:	02/10/06	Lab ID:	602084-05
Date Analyzed:	02/10/06	Data File:	021011.D
Matrix:	water	Instrument:	GCMS5
Units:	ug/L (ppb)	Operator:	YA

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Dibromofluoromethane	88	75	141
1,2-Dichloroethane-d4	108	59	155
Toluene-d8	95	69	145

Compounds:	Concentration ug/L (ppb)
Ethanol	<1,000
t-Butyl alcohol (TBA)	<5
Methyl t-butyl ether (MTBE)	<0.5
Ethyl t-butyl ether (ETBE)	<0.5
Diisopropyl ether (DIPE)	<0.5
t-Amyl methyl ether (TAME)	<0.5
Benzene	<0.5
Toluene	0.7
Ethylbenzene	<0.5
m,p-Xylene	1.2
o-Xylene	<0.5
1,2-Dichloroethane (EDC)	<0.5
1,2-Dibromoethane (EDB)	<0.5

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260B SIM

Client Sample ID:	MW-27d75	Client:	ECM Group
Date Received:	02/09/06	Project:	98-507-14 Yolanda, F&BI 602084
Date Extracted:	02/10/06	Lab ID:	602084-06
Date Analyzed:	02/10/06	Data File:	021012.D
Matrix:	water	Instrument:	GCMS5
Units:	ug/L (ppb)	Operator:	YA

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Dibromofluoromethane	82	75	141
1,2-Dichloroethane-d4	92	59	155
Toluene-d8	91	69	145

Compounds:	Concentration ug/L (ppb)
Ethanol	<1,000
t-Butyl alcohol (TBA)	26
Methyl t-butyl ether (MTBE)	<0.5
Ethyl t-butyl ether (ETBE)	<0.5
Diisopropyl ether (DIPE)	<0.5
t-Amyl methyl ether (TAME)	<0.5
Benzene	<0.5
Toluene	1.2
Ethylbenzene	<0.5
m,p-Xylene	1.2
o-Xylene	<0.5
1,2-Dichloroethane (EDC)	<0.5
1,2-Dibromoethane (EDB)	<0.5

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260B SIM

Client Sample ID:	MW-27d145	Client:	ECM Group
Date Received:	02/09/06	Project:	98-507-14 Yolanda, F&BI 602084
Date Extracted:	02/10/06	Lab ID:	602084-07
Date Analyzed:	02/10/06	Data File:	021013.D
Matrix:	water	Instrument:	GCMS5
Units:	ug/L (ppb)	Operator:	YA

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Dibromofluoromethane	86	75	141
1,2-Dichloroethane-d4	94	59	155
Toluene-d8	99	69	145

Compounds:	Concentration ug/L (ppb)
Ethanol	<1,000
t-Butyl alcohol (TBA)	<5
Methyl t-butyl ether (MTBE)	<0.5
Ethyl t-butyl ether (ETBE)	<0.5
Diisopropyl ether (DIPE)	0.6
t-Amyl methyl ether (TAME)	<0.5
Benzene	<0.5
Toluene	1.1
Ethylbenzene	<0.5
m,p-Xylene	<1
o-Xylene	0.5
1,2-Dichloroethane (EDC)	<0.5
1,2-Dibromoethane (EDB)	<0.5

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260B SIM

Client Sample ID:	MW-27d180	Client:	ECM Group
Date Received:	02/09/06	Project:	98-507-14 Yolanda, F&BI 602084
Date Extracted:	02/10/06	Lab ID:	602084-08
Date Analyzed:	02/10/06	Data File:	021014.D
Matrix:	water	Instrument:	GCMS5
Units:	ug/L (ppb)	Operator:	YA

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Dibromofluoromethane	70 vo	75	141
1,2-Dichloroethane-d4	72	59	155
Toluene-d8	89	69	145

Compounds:	Concentration ug/L (ppb)
Ethanol	<1,000 J
t-Butyl alcohol (TBA)	<5 J
Methyl t-butyl ether (MTBE)	<0.5 J
Ethyl t-butyl ether (ETBE)	<0.5 J
Diisopropyl ether (DIPE)	<0.5 J
t-Amyl methyl ether (TAME)	<0.5 J
Benzene	<0.5
Toluene	3.2
Ethylbenzene	<0.5
m,p-Xylene	1.2
o-Xylene	0.5
1,2-Dichloroethane (EDC)	<0.5
1,2-Dibromoethane (EDB)	<0.5

vo - The value reported fell outside the control limits established for this analyte.

J - The surrogate associated with this analyte is out of control limits. The reported concentration is an estimate.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260B SIM

Client Sample ID:	MW-27d230	Client:	ECM Group
Date Received:	02/09/06	Project:	98-507-14 Yolanda, F&BI 602084
Date Extracted:	02/10/06	Lab ID:	602084-09
Date Analyzed:	02/10/06	Data File:	021015.D
Matrix:	water	Instrument:	GCMS5
Units:	ug/L (ppb)	Operator:	YA

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Dibromofluoromethane	68 vo	75	141
1,2-Dichloroethane-d4	69	59	155
Toluene-d8	91	69	145

Compounds:	Concentration ug/L (ppb)
Ethanol	<1,000 J
t-Butyl alcohol (TBA)	<5 J
Methyl t-butyl ether (MTBE)	<0.5 J
Ethyl t-butyl ether (ETBE)	<0.5 J
Diisopropyl ether (DIPE)	<0.5 J
t-Amyl methyl ether (TAME)	<0.5 J
Benzene	<0.5
Toluene	<0.5
Ethylbenzene	<0.5
m,p-Xylene	<1
o-Xylene	<0.5
1,2-Dichloroethane (EDC)	<0.5
1,2-Dibromoethane (EDB)	<0.5

vo - The value reported fell outside the control limits established for this analyte.

J - The surrogate associated with this analyte is out of control limits. The reported concentration is an estimate.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260B SIM

Client Sample ID:	Method Blank	Client:	ECM Group
Date Received:	Not Applicable	Project:	98-507-14 Yolanda, F&BI 602084
Date Extracted:	02/10/06	Lab ID:	06-261 mb
Date Analyzed:	02/10/06	Data File:	021006.D
Matrix:	water	Instrument:	GCMS5
Units:	ug/L (ppb)	Operator:	YA

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Dibromofluoromethane	88	75	141
1,2-Dichloroethane-d4	120	59	155
Toluene-d8	96	69	145

Compounds:	Concentration ug/L (ppb)
Ethanol	<1,000
t-Butyl alcohol (TBA)	<5
Methyl t-butyl ether (MTBE)	<0.5
Ethyl t-butyl ether (ETBE)	<0.5
Diisopropyl ether (DIPE)	<0.5
t-Amyl methyl ether (TAME)	<0.5
Benzene	<0.5
Toluene	<0.5
Ethylbenzene	<0.5
m,p-Xylene	<1
o-Xylene	<0.5
1,2-Dichloroethane (EDC)	<0.5
1,2-Dibromoethane (EDB)	<0.5

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 02/16/06

Date Received: 02/09/06

Project: 98-507-14 Yolanda, F&BI 602084

**QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF WATER
SAMPLES FOR TOTAL PETROLEUM HYDROCARBONS AS GASOLINE
USING EPA METHOD 8015M**

Laboratory Code: 602084-05 (Duplicate)

Analyte	Reporting Units	Sample Result	Duplicate Result	Relative Percent Difference (Limit 20)
Gasoline	µg/L (ppb)	<100	<100	nm

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Gasoline	µg/L (ppb)	1,000	85	63-129

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 02/16/06

Date Received: 02/09/06

Project: 98-507-14 Yolanda, F&BI 602084

**QUALITY ASSURANCE RESULTS FOR THE ANALYSIS
OF WATER SAMPLES FOR VOLATILES BY EPA METHOD 8260B SIM**

Laboratory Code: 602084-01 (Duplicate)

Analyte	Reporting Units	Sample Result	Duplicate Result	Relative Percent Difference (Limit 20)
Ethanol	µg/L (ppb)	<1,000	<1,000	nm
t-Butyl alcohol (TBA)	µg/L (ppb)	<5	<5	nm
Methyl t-butyl ether (MTBE)	µg/L (ppb)	<0.5	<0.5	nm
Diisopropyl ether (DIPE)	µg/L (ppb)	<0.5	<0.5	nm
Ethyl t-butyl ether (ETBE)	µg/L (ppb)	<0.5	<0.5	nm
t-Amyl methyl ether (TAME)	µg/L (ppb)	<0.5	<0.5	nm
Benzene	µg/L (ppb)	<0.5	<0.5	nm
Toluene	µg/L (ppb)	<0.5	<0.5	nm
Ethylbenzene	µg/L (ppb)	<0.5	<0.5	nm
m,p-Xylene	µg/L (ppb)	<1	<1	nm
o-Xylene	µg/L (ppb)	<0.5	<0.5	nm
1,2-Dichloroethane (EDC)	µg/L (ppb)	<0.5	<0.5	nm
1,2-Dibromoethane (EDB)	µg/L (ppb)	<0.5	<0.5	nm

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Ethanol	µg/L (ppb)	500	82	55-151
t-Butyl alcohol (TBA)	µg/L (ppb)	50	88	49-144
Methyl t-butyl ether (MTBE)	µg/L (ppb)	10	92	69-126
Diisopropyl ether (DIPE)	µg/L (ppb)	10	92	68-138
Ethyl t-butyl ether (ETBE)	µg/L (ppb)	10	96	69-131
t-Amyl methyl ether (TAME)	µg/L (ppb)	10	94	70-127
Benzene	µg/L (ppb)	20	98	66-127
Toluene	µg/L (ppb)	20	100	67-133
Ethylbenzene	µg/L (ppb)	10	102	70-130
m,p-Xylene	µg/L (ppb)	10	107	70-130

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

602084

SAMPLE CHAIN OF CUSTODY

ME 02109/05

v4

Send Report To D. West

Company ECM Group

Address PO Box 802

City, State, ZIP Benicia, CA 94521

Phone # (707) 751-0655 Fax # (707) 751-0653

SAMPLERS (*signature*)

PROJECT NAME/NO.
98-507-14

YOLANDA

REMARKS

PO #

Page # 1 of 2

TURNAROUND TIME

~~18~~ Standard (2 Weeks)

BUSH

Rush _____
Bush charges authorized by:

SAMPLE DISPOSAL

Dispose after 30 days

Return samples

Will call with instructions

*Friedman & Bruya, Inc.
3012 16th Avenue West*

Seattle, WA 98119-2029

Ph. (206) 285-8282

Fax (206) 283-5044

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: Douglas West	Douglas West	Ecm Group	2-1-06	
Received by: David FedEx				
Relinquished by:				
Received by: Nhan Phan	Nhan Phan	FeBI	2-9-06	09:00

602084

SAMPLE CHAIN OF CUSTODY

ME 02/09/06

V4

Send Report To D. West

Company ECM Group

Address PO Box 802

City, State, ZIP Benicia, CA 94521

Phone # (707) 751-0655 Fax # (707) 751-0653

SAMPLERS (signature) <i>D. West</i>	PROJECT NAME/NO. 98-507-14 YOLANDA	PO #
REMARKS		

Page # 2 of 2

TURNAROUND TIME	
<input checked="" type="checkbox"/> Standard (2 Weeks)	<input type="checkbox"/> RUSH
Rush charges authorized by:	
SAMPLE DISPOSAL	
<input checked="" type="checkbox"/> Dispose after 30 days	<input type="checkbox"/> Return samples
<input type="checkbox"/> Will call with instructions	

Sample ID	Lab ID	Date	Time <i>JP 2/8/06</i>	Sample Type	# of containers	ANALYSES REQUESTED						Notes	
						TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260	SVOCs by 8270	HFS	Oxygen test	
MW-27 d 25	05 A-D	2-1-06	1:35	Liquid	4	/	/				/	/	
MW-27 d 75	06 A-D	2-1-06	1:45		4	/	/				/	/	
MW-27 d 145	07 A-D	2-1-06	1:55		4	/	/				/	/	
MW-27 d 180	08 A-D	2-1-06	2:10		4	/	/				/	/	
MW-27 d 230	09 A-D	2-1-06	2:25	↓	4	/	/				/	/	

Friedman & Bruya, Inc.
3012 16th Avenue West
Seattle, WA 98119-2029
Ph. (206) 285-8282
Fax (206) 283-5044

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: <i>D. West</i>	Douglas West	ECM Group	2-1-06	
Received by: 2005 FedEx				
Relinquished by:				
Received by: <i>Nhan Phan</i>	Nhan Phan	FBI	2-9-06	09:00

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.
Charlene Morrow, M.S.
Yelena Aravkina, M.S.
Bradley T. Benson, B.S.
Kurt Johnson, B.S.

3012 16th Avenue West
Seattle, WA 98119-2029
TEL: (206) 285-8282
FAX: (206) 283-5044
e-mail: fbi@isomedia.com

February 16, 2006

Jim Green, Project Manager
ECM Group
P.O. Box 802
Benicia, CA 94510

Dear Mr. Green:

Included are the results from the testing of material submitted on January 31, 2006 from the Yolanda, 98-507-14, F&BI 601274 project. There are 29 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

We appreciate this opportunity to be of service to you and hope you will call if you should have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.



Michael Erdahl
Project Manager

Enclosures

ECM0216R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on January 31, 2006 by Friedman & Bruya, Inc. from the ECM Group Yolanda, 98-507-14, F&BI 601274 project. Samples were logged in under the laboratory ID's listed below.

<u>Laboratory ID</u>	<u>ECM Group</u>
601274-01	MW-24d25
601274-02	MW-24d75
601274-03	MW-24d145
601274-04	MW-24d180
601274-05	MW-25d25
601274-06	MW-25d75
601274-07	MW-25d145
601274-08	MW-25d180
601274-09	MW-25d230
601274-10	MW-28d25
601274-11	MW-28d75
601274-12	MW-28d145
601274-13	MW-28d180
601274-14	MW-29d25
601274-15	MW-29d75
601274-16	MW-29d145
601274-17	MW-29d180
601274-18	MW-30d25
601274-19	MW-30d75
601274-20	MW-30d145
601274-21	MW-30d180
601274-22	MW-30d230

All quality control requirements were not acceptable. A surrogate recovery was outside of established acceptance criteria for samples MW-24d180, MW-25d75, MW-25d180, MW-28d75, and MW-28d145. Associated analytes are flagged as estimates. Samples were not reanalyzed due to insufficient hold time.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 02/16/06

Date Received: 01/31/06

Project: Yolanda, 98-507-14, F&BI 601274

Date Extracted: 02/07/06

Date Analyzed: 02/08/06

**RESULTS FROM THE ANALYSIS OF THE WATER SAMPLES
FOR TOTAL PETROLEUM HYDROCARBONS AS GASOLINE
USING EPA METHOD 8015M**

Results Reported as µg/L (ppb)

<u>Sample ID</u> Laboratory ID	<u>Gasoline Range</u> (C ₆ -C ₁₀)	Surrogate (% Recovery) (Limit 52-150)
MW-24d25 601274-01	<100	72
MW-24d75 601274-02	<100	74
MW-24d145 601274-03	<100	74
MW-24d180 601274-04	<100	76
MW-25d25 601274-05	<100	75
MW-25d75 601274-06	<100	74
MW-25d145 601274-07	<100	75
MW-25d180 601274-08	<100	75
MW-25d230 601274-09	<100	77
Method Blank	<100	78

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260B SIM

Client Sample ID:	MW-24d25	Client:	ECM Group
Date Received:	01/31/06	Project:	Yolanda, 98-507-14, F&BI 601274
Date Extracted:	02/03/06	Lab ID:	601274-01
Date Analyzed:	02/03/06	Data File:	020307.D
Matrix:	water	Instrument:	GCMS5
Units:	ug/L (ppb)	Operator:	YA

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Dibromofluoromethane	104	75	141
1,2-Dichloroethane-d4	122	59	155
Toluene-d8	121	69	145
4-Bromofluorobenzene	113	75	151

Compounds:	Concentration ug/L (ppb)
Ethanol	<1,000
t-Butyl alcohol (TBA)	<5
Methyl t-butyl ether (MTBE)	93
Ethyl t-butyl ether (ETBE)	<0.5
Diisopropyl ether (DIPE)	<0.5
t-Amyl methyl ether (TAME)	1.4
Benzene	<0.5
Toluene	<0.5
Ethylbenzene	<0.5
m,p-Xylene	<1
o-Xylene	<0.5
1,2-Dichloroethane (EDC)	<0.5
1,2-Dibromoethane (EDB)	<0.5

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260B SIM

Client Sample ID:	MW-24d75	Client:	ECM Group
Date Received:	01/31/06	Project:	Yolanda, 98-507-14, F&BI 601274
Date Extracted:	02/03/06	Lab ID:	601274-02
Date Analyzed:	02/03/06	Data File:	020309.D
Matrix:	water	Instrument:	GCMS5
Units:	ug/L (ppb)	Operator:	YA

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Dibromofluoromethane	76	75	141
1,2-Dichloroethane-d4	94	59	155
Toluene-d8	79	69	145
4-Bromofluorobenzene	81	75	151

Compounds:	Concentration ug/L (ppb)
Ethanol	<1,000
t-Butyl alcohol (TBA)	<5
Methyl t-butyl ether (MTBE)	1.4
Ethyl t-butyl ether (ETBE)	<0.5
Diisopropyl ether (DIPE)	<0.5
t-Amyl methyl ether (TAME)	<0.5
Benzene	<0.5
Toluene	<0.5
Ethylbenzene	<0.5
m,p-Xylene	<1
o-Xylene	<0.5
1,2-Dichloroethane (EDC)	<0.5
1,2-Dibromoethane (EDB)	<0.5

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260B SIM

Client Sample ID:	MW-24d145	Client:	ECM Group
Date Received:	01/31/06	Project:	Yolanda, 98-507-14, F&BI 601274
Date Extracted:	02/03/06	Lab ID:	601274-03
Date Analyzed:	02/03/06	Data File:	020310.D
Matrix:	water	Instrument:	GCMS5
Units:	ug/L (ppb)	Operator:	YA

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Dibromofluoromethane	75	75	141
1,2-Dichloroethane-d4	92	59	155
Toluene-d8	80	69	145
4-Bromofluorobenzene	81	75	151

Compounds:	Concentration ug/L (ppb)
Ethanol	<1,000
t-Butyl alcohol (TBA)	5.2
Methyl t-butyl ether (MTBE)	1.2
Ethyl t-butyl ether (ETBE)	<0.5
Diisopropyl ether (DIPE)	<0.5
t-Amyl methyl ether (TAME)	<0.5
Benzene	<0.5
Toluene	<0.5
Ethylbenzene	<0.5
m,p-Xylene	<1
o-Xylene	<0.5
1,2-Dichloroethane (EDC)	<0.5
1,2-Dibromoethane (EDB)	<0.5

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260B SIM

Client Sample ID:	MW-24d180	Client:	ECM Group
Date Received:	01/31/06	Project:	Yolanda, 98-507-14, F&BI 601274
Date Extracted:	02/03/06	Lab ID:	601274-04
Date Analyzed:	02/03/06	Data File:	020311.D
Matrix:	water	Instrument:	GCMS5
Units:	ug/L (ppb)	Operator:	YA

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Dibromofluoromethane	72 vo	75	141
1,2-Dichloroethane-d4	92	59	155
Toluene-d8	77	69	145
4-Bromofluorobenzene	77	75	151

Compounds:	Concentration ug/L (ppb)
Ethanol	<1,000 J
t-Butyl alcohol (TBA)	<5 J
Methyl t-butyl ether (MTBE)	<0.5 J
Ethyl t-butyl ether (ETBE)	<0.5 J
Diisopropyl ether (DIPE)	<0.5 J
t-Amyl methyl ether (TAME)	<0.5 J
Benzene	<0.5
Toluene	<0.5
Ethylbenzene	<0.5
m,p-Xylene	<1
o-Xylene	<0.5
1,2-Dichloroethane (EDC)	<0.5
1,2-Dibromoethane (EDB)	<0.5

vo - The value reported fell outside the control limits established for this analyte.

J - The result for the surrogate associated with this analyte is out of control limits. The reported concentration is an estimate.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260B SIM

Client Sample ID:	MW-25d25	Client:	ECM Group
Date Received:	01/31/06	Project:	Yolanda, 98-507-14, F&BI 601274
Date Extracted:	02/03/06	Lab ID:	601274-05
Date Analyzed:	02/03/06	Data File:	020312.D
Matrix:	water	Instrument:	GCMS5
Units:	ug/L (ppb)	Operator:	YA

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Dibromofluoromethane	83	75	141
1,2-Dichloroethane-d4	110	59	155
Toluene-d8	95	69	145
4-Bromofluorobenzene	88	75	151

Compounds:	Concentration ug/L (ppb)
Ethanol	<1,000
t-Butyl alcohol (TBA)	<5
Methyl t-butyl ether (MTBE)	<0.5
Ethyl t-butyl ether (ETBE)	<0.5
Diisopropyl ether (DIPE)	<0.5
t-Amyl methyl ether (TAME)	<0.5
Benzene	<0.5
Toluene	<0.5
Ethylbenzene	<0.5
m,p-Xylene	<1
o-Xylene	<0.5
1,2-Dichloroethane (EDC)	<0.5
1,2-Dibromoethane (EDB)	<0.5

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260B SIM

Client Sample ID:	MW-25d75	Client:	ECM Group
Date Received:	01/31/06	Project:	Yolanda, 98-507-14, F&BI 601274
Date Extracted:	02/03/06	Lab ID:	601274-06
Date Analyzed:	02/03/06	Data File:	020313.D
Matrix:	water	Instrument:	GCMS5
Units:	ug/L (ppb)	Operator:	YA

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Dibromofluoromethane	72 vo	75	141
1,2-Dichloroethane-d4	90	59	155
Toluene-d8	83	69	145
4-Bromofluorobenzene	76	75	151

Compounds:	Concentration ug/L (ppb)
Ethanol	<1,000 J
t-Butyl alcohol (TBA)	<5 J
Methyl t-butyl ether (MTBE)	<0.5 J
Ethyl t-butyl ether (ETBE)	<0.5 J
Diisopropyl ether (DIPE)	<0.5 J
t-Amyl methyl ether (TAME)	<0.5 J
Benzene	<0.5
Toluene	1.1
Ethylbenzene	<0.5
m,p-Xylene	<1
o-Xylene	<0.5
1,2-Dichloroethane (EDC)	<0.5
1,2-Dibromoethane (EDB)	<0.5

vo - The value reported fell outside the control limits established for this analyte.

J - The result for the surrogate associated with this analyte is out of control limits. The reported concentration is an estimate.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260B SIM

Client Sample ID:	MW-25d145	Client:	ECM Group
Date Received:	01/31/06	Project:	Yolanda, 98-507-14, F&BI 601274
Date Extracted:	02/03/06	Lab ID:	601274-07
Date Analyzed:	02/03/06	Data File:	020314.D
Matrix:	water	Instrument:	GCMS5
Units:	ug/L (ppb)	Operator:	YA

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Dibromofluoromethane	76	75	141
1,2-Dichloroethane-d4	95	59	155
Toluene-d8	85	69	145
4-Bromofluorobenzene	79	75	151

Compounds:	Concentration ug/L (ppb)
Ethanol	<1,000
t-Butyl alcohol (TBA)	11
Methyl t-butyl ether (MTBE)	<0.5
Ethyl t-butyl ether (ETBE)	<0.5
Diisopropyl ether (DIPE)	0.6
t-Amyl methyl ether (TAME)	<0.5
Benzene	<0.5
Toluene	1.1
Ethylbenzene	<0.5
m,p-Xylene	<1
o-Xylene	<0.5
1,2-Dichloroethane (EDC)	<0.5
1,2-Dibromoethane (EDB)	<0.5

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260B SIM

Client Sample ID:	MW-25d180	Client:	ECM Group
Date Received:	01/31/06	Project:	Yolanda, 98-507-14, F&BI 601274
Date Extracted:	02/03/06	Lab ID:	601274-08
Date Analyzed:	02/03/06	Data File:	020315.D
Matrix:	water	Instrument:	GCMS5
Units:	ug/L (ppb)	Operator:	YA

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Dibromofluoromethane	74 vo	75	141
1,2-Dichloroethane-d4	87	59	155
Toluene-d8	84	69	145
4-Bromofluorobenzene	77	75	151

Compounds:	Concentration ug/L (ppb)
Ethanol	<1,000 J
t-Butyl alcohol (TBA)	<5 J
Methyl t-butyl ether (MTBE)	<0.5 J
Ethyl t-butyl ether (ETBE)	<0.5 J
Diisopropyl ether (DIPE)	0.6 J
t-Amyl methyl ether (TAME)	<0.5 J
Benzene	<0.5
Toluene	9.0
Ethylbenzene	<0.5
m,p-Xylene	<1
o-Xylene	<0.5
1,2-Dichloroethane (EDC)	<0.5
1,2-Dibromoethane (EDB)	<0.5

vo - The value reported fell outside the control limits established for this analyte.

J - The result for the surrogate associated with this analyte is out of control limits. The reported concentration is an estimate.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260B SIM

Client Sample ID:	MW-25d230	Client:	ECM Group
Date Received:	01/31/06	Project:	Yolanda, 98-507-14, F&BI 601274
Date Extracted:	02/03/06	Lab ID:	601274-09
Date Analyzed:	02/03/06	Data File:	020316.D
Matrix:	water	Instrument:	GCMS5
Units:	ug/L (ppb)	Operator:	YA

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Dibromofluoromethane	80	75	141
1,2-Dichloroethane-d4	93	59	155
Toluene-d8	92	69	145
4-Bromofluorobenzene	82	75	151

Compounds:	Concentration ug/L (ppb)
Ethanol	<1,000
t-Butyl alcohol (TBA)	5.2
Methyl t-butyl ether (MTBE)	<0.5
Ethyl t-butyl ether (ETBE)	<0.5
Diisopropyl ether (DIPE)	0.6
t-Amyl methyl ether (TAME)	<0.5
Benzene	<0.5
Toluene	6.2
Ethylbenzene	<0.5
m,p-Xylene	<1
o-Xylene	<0.5
1,2-Dichloroethane (EDC)	<0.5
1,2-Dibromoethane (EDB)	<0.5

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260B SIM

Client Sample ID:	MW-28d25	Client:	ECM Group
Date Received:	01/31/06	Project:	Yolanda, 98-507-14, F&BI 601274
Date Extracted:	02/03/06	Lab ID:	601274-10
Date Analyzed:	02/03/06	Data File:	020317.D
Matrix:	water	Instrument:	GCMS5
Units:	ug/L (ppb)	Operator:	YA

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Dibromofluoromethane	85	75	141
1,2-Dichloroethane-d4	93	59	155
Toluene-d8	97	69	145
4-Bromofluorobenzene	90	75	151

Compounds:	Concentration ug/L (ppb)
Ethanol	<1,000
t-Butyl alcohol (TBA)	<5
Methyl t-butyl ether (MTBE)	<0.5
Ethyl t-butyl ether (ETBE)	<0.5
Diisopropyl ether (DIPE)	<0.5
t-Amyl methyl ether (TAME)	<0.5
1,2-Dichloroethane (EDC)	<0.5
1,2-Dibromoethane (EDB)	<0.5

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ENVIRONMENTAL CHEMISTS

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ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260B SIM

Client Sample ID:	MW-28d75	Client:	ECM Group
Date Received:	01/31/06	Project:	Yolanda, 98-507-14, F&BI 601274
Date Extracted:	02/03/06	Lab ID:	601274-11
Date Analyzed:	02/03/06	Data File:	020318.D
Matrix:	water	Instrument:	GCMS5
Units:	ug/L (ppb)	Operator:	YA

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Dibromofluoromethane	68 vo	75	141
1,2-Dichloroethane-d4	68	59	155
Toluene-d8	81	69	145
4-Bromofluorobenzene	77	75	151

Compounds:	Concentration ug/L (ppb)
Ethanol	<1,000 J
t-Butyl alcohol (TBA)	<5 J
Methyl t-butyl ether (MTBE)	<0.5 J
Ethyl t-butyl ether (ETBE)	<0.5 J
Diisopropyl ether (DIPE)	<0.5 J
t-Amyl methyl ether (TAME)	<0.5 J
1,2-Dichloroethane (EDC)	<0.5
1,2-Dibromoethane (EDB)	<0.5

vo - The value reported fell outside the control limits established for this analyte.

J - The result for the surrogate associated with this analyte is out of control limits. The reported concentration is an estimate.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260B SIM

Client Sample ID: MW-28d145
Date Received: 01/31/06
Date Extracted: 02/03/06
Date Analyzed: 02/04/06
Matrix: water
Units: ug/L (ppb)

Client: ECM Group
Project: Yolanda, 98-507-14, F&BI 601274
Lab ID: 601274-12
Data File: 020319.D
Instrument: GCMS5
Operator: YA

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Dibromofluoromethane	66 vo	75	141
1,2-Dichloroethane-d4	61	59	155
Toluene-d8	85	69	145
4-Bromofluorobenzene	83	75	151

Compounds:	Concentration ug/L (ppb)
Ethanol	<1,000 J
t-Butyl alcohol (TBA)	<5 J
Methyl t-butyl ether (MTBE)	<0.5 J
Ethyl t-butyl ether (ETBE)	<0.5 J
Diisopropyl ether (DIPE)	<0.5 J
t-Amyl methyl ether (TAME)	<0.5 J
1,2-Dichloroethane (EDC)	<0.5
1,2-Dibromoethane (EDB)	<0.5

vo - The value reported fell outside the control limits established for this analyte.

J - The result for the surrogate associated with this analyte is out of control limits. The reported concentration is an estimate.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260B SIM

Client Sample ID:	MW-28d180	Client:	ECM Group
Date Received:	01/31/06	Project:	Yolanda, 98-507-14, F&BI 601274
Date Extracted:	02/03/06	Lab ID:	601274-13
Date Analyzed:	02/06/06	Data File:	020618.D
Matrix:	water	Instrument:	GCMS5
Units:	ug/L (ppb)	Operator:	YA

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Dibromofluoromethane	84	75	141
1,2-Dichloroethane-d4	123	59	155
Toluene-d8	99	69	145
4-Bromofluorobenzene	86	75	151

Compounds:	Concentration ug/L (ppb)
Ethanol	<1,000
t-Butyl alcohol (TBA)	9.5
Methyl t-butyl ether (MTBE)	<0.5
Ethyl t-butyl ether (ETBE)	<0.5
Diisopropyl ether (DIPE)	<0.5
t-Amyl methyl ether (TAME)	<0.5
1,2-Dichloroethane (EDC)	<0.5
1,2-Dibromoethane (EDB)	<0.5

Analysis For Volatile Compounds By EPA Method 8260B SIM

Client Sample ID:	MW-29d25	Client:	ECM Group
Date Received:	01/31/06	Project:	Yolanda, 98-507-14, F&BI 601274
Date Extracted:	02/03/06	Lab ID:	601274-14
Date Analyzed:	02/06/06	Data File:	020619.D
Matrix:	water	Instrument:	GCMS5
Units:	ug/L (ppb)	Operator:	YA

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Dibromofluoromethane	87	75	141
1,2-Dichloroethane-d4	127	59	155
Toluene-d8	105	69	145
4-Bromofluorobenzene	90	75	151

Compounds:	Concentration ug/L (ppb)
Ethanol	<1,000
t-Butyl alcohol (TBA)	11
Methyl t-butyl ether (MTBE)	<0.5
Ethyl t-butyl ether (ETBE)	<0.5
Diisopropyl ether (DIPE)	<0.5
t-Amyl methyl ether (TAME)	<0.5
1,2-Dichloroethane (EDC)	<0.5
1,2-Dibromoethane (EDB)	<0.5

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260B SIM

Client Sample ID:	MW-29d75	Client:	ECM Group
Date Received:	01/31/06	Project:	Yolanda, 98-507-14, F&BI 601274
Date Extracted:	02/03/06	Lab ID:	601274-15
Date Analyzed:	02/07/06	Data File:	020620.D
Matrix:	water	Instrument:	GCMS5
Units:	ug/L (ppb)	Operator:	YA

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Dibromofluoromethane	87	75	141
1,2-Dichloroethane-d4	120	59	155
Toluene-d8	107	69	145
4-Bromofluorobenzene	91	75	151

Compounds:	Concentration ug/L (ppb)
Ethanol	<1,000
t-Butyl alcohol (TBA)	5.3
Methyl t-butyl ether (MTBE)	<0.5
Ethyl t-butyl ether (ETBE)	<0.5
Diisopropyl ether (DIPE)	<0.5
t-Amyl methyl ether (TAME)	<0.5
1,2-Dichloroethane (EDC)	<0.5
1,2-Dibromoethane (EDB)	<0.5

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260B SIM

Client Sample ID:	MW-29d145	Client:	ECM Group
Date Received:	01/31/06	Project:	Yolanda, 98-507-14, F&BI 601274
Date Extracted:	02/03/06	Lab ID:	601274-16
Date Analyzed:	02/07/06	Data File:	020621.D
Matrix:	water	Instrument:	GCMS5
Units:	ug/L (ppb)	Operator:	YA

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Dibromofluoromethane	88	75	141
1,2-Dichloroethane-d4	130	59	155
Toluene-d8	108	69	145
4-Bromofluorobenzene	94	75	151

Compounds:	Concentration ug/L (ppb)
Ethanol	<1,000
t-Butyl alcohol (TBA)	<5
Methyl t-butyl ether (MTBE)	<0.5
Ethyl t-butyl ether (ETBE)	<0.5
Diisopropyl ether (DIPE)	<0.5
t-Amyl methyl ether (TAME)	<0.5
1,2-Dichloroethane (EDC)	<0.5
1,2-Dibromoethane (EDB)	<0.5

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260B SIM

Client Sample ID:	MW-29d180	Client:	ECM Group
Date Received:	01/31/06	Project:	Yolanda, 98-507-14, F&BI 601274
Date Extracted:	02/03/06	Lab ID:	601274-17
Date Analyzed:	02/07/06	Data File:	020622.D
Matrix:	water	Instrument:	GCMS5
Units:	ug/L (ppb)	Operator:	YA

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Dibromofluoromethane	85	75	141
1,2-Dichloroethane-d4	126	59	155
Toluene-d8	104	69	145
4-Bromofluorobenzene	91	75	151

Compounds:	Concentration ug/L (ppb)
Ethanol	<1,000
t-Butyl alcohol (TBA)	<5
Methyl t-butyl ether (MTBE)	<0.5
Ethyl t-butyl ether (ETBE)	<0.5
Diisopropyl ether (DIPE)	<0.5
t-Amyl methyl ether (TAME)	<0.5
1,2-Dichloroethane (EDC)	<0.5
1,2-Dibromoethane (EDB)	<0.5

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260B SIM

Client Sample ID:	MW-30d25	Client:	ECM Group
Date Received:	01/31/06	Project:	Yolanda, 98-507-14, F&BI 601274
Date Extracted:	02/03/06	Lab ID:	601274-18
Date Analyzed:	02/07/06	Data File:	020623.D
Matrix:	water	Instrument:	GCMS5
Units:	ug/L (ppb)	Operator:	YA

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Dibromofluoromethane	81	75	141
1,2-Dichloroethane-d4	109	59	155
Toluene-d8	100	69	145
4-Bromofluorobenzene	89	75	151

Compounds:	Concentration ug/L (ppb)
Ethanol	<1,000
t-Butyl alcohol (TBA)	<5
Methyl t-butyl ether (MTBE)	110
Ethyl t-butyl ether (ETBE)	<0.5
Diisopropyl ether (DIPE)	<0.5
t-Amyl methyl ether (TAME)	0.9
1,2-Dichloroethane (EDC)	<0.5
1,2-Dibromoethane (EDB)	<0.5

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260B SIM

Client Sample ID:	MW-30d75	Client:	ECM Group
Date Received:	01/31/06	Project:	Yolanda, 98-507-14, F&BI 601274
Date Extracted:	02/03/06	Lab ID:	601274-19
Date Analyzed:	02/07/06	Data File:	020624.D
Matrix:	water	Instrument:	GCMS5
Units:	ug/L (ppb)	Operator:	YA

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Dibromofluoromethane	79	75	141
1,2-Dichloroethane-d4	115	59	155
Toluene-d8	97	69	145
4-Bromofluorobenzene	84	75	151

Compounds:	Concentration ug/L (ppb)
Ethanol	<1,000
t-Butyl alcohol (TBA)	<5
Methyl t-butyl ether (MTBE)	5.2
Ethyl t-butyl ether (ETBE)	<0.5
Diisopropyl ether (DIPE)	1.7
t-Amyl methyl ether (TAME)	<0.5
1,2-Dichloroethane (EDC)	0.8
1,2-Dibromoethane (EDB)	<0.5

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260B SIM

Client Sample ID:	MW-30d145	Client:	ECM Group
Date Received:	01/31/06	Project:	Yolanda, 98-507-14, F&BI 601274
Date Extracted:	02/03/06	Lab ID:	601274-20
Date Analyzed:	02/07/06	Data File:	020625.D
Matrix:	water	Instrument:	GCMS5
Units:	ug/L (ppb)	Operator:	YA

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Dibromofluoromethane	78	75	141
1,2-Dichloroethane-d4	116	59	155
Toluene-d8	97	69	145
4-Bromofluorobenzene	85	75	151

Compounds:	Concentration ug/L (ppb)
Ethanol	<1,000
t-Butyl alcohol (TBA)	5.7
Methyl t-butyl ether (MTBE)	2.8
Ethyl t-butyl ether (ETBE)	<0.5
Diisopropyl ether (DIPE)	0.9
t-Amyl methyl ether (TAME)	<0.5
1,2-Dichloroethane (EDC)	0.5
1,2-Dibromoethane (EDB)	<0.5

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260B SIM

Client Sample ID:	MW-30d180	Client:	ECM Group
Date Received:	01/31/06	Project:	Yolanda, 98-507-14, F&BI 601274
Date Extracted:	02/03/06	Lab ID:	601274-21
Date Analyzed:	02/07/06	Data File:	020626.D
Matrix:	water	Instrument:	GCMS5
Units:	ug/L (ppb)	Operator:	YA

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Dibromofluoromethane	88	75	141
1,2-Dichloroethane-d4	127	59	155
Toluene-d8	106	69	145
4-Bromofluorobenzene	94	75	151

Compounds:	Concentration ug/L (ppb)
Ethanol	<1,000
t-Butyl alcohol (TBA)	5.7
Methyl t-butyl ether (MTBE)	1.9
Ethyl t-butyl ether (ETBE)	<0.5
Diisopropyl ether (DIPE)	0.7
t-Amyl methyl ether (TAME)	<0.5
1,2-Dichloroethane (EDC)	<0.5
1,2-Dibromoethane (EDB)	<0.5

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260B SIM

Client Sample ID:	MW-30d230	Client:	ECM Group
Date Received:	01/31/06	Project:	Yolanda, 98-507-14, F&BI 601274
Date Extracted:	02/03/06	Lab ID:	601274-22
Date Analyzed:	02/07/06	Data File:	020627.D
Matrix:	water	Instrument:	GCMS5
Units:	ug/L (ppb)	Operator:	YA

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Dibromofluoromethane	83	75	141
1,2-Dichloroethane-d4	122	59	155
Toluene-d8	103	69	145
4-Bromofluorobenzene	93	75	151

Compounds:	Concentration ug/L (ppb)
Ethanol	<1,000
t-Butyl alcohol (TBA)	8.4
Methyl t-butyl ether (MTBE)	2.0
Ethyl t-butyl ether (ETBE)	<0.5
Diisopropyl ether (DIPE)	0.8
t-Amyl methyl ether (TAME)	<0.5
1,2-Dichloroethane (EDC)	<0.5
1,2-Dibromoethane (EDB)	<0.5

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260B SIM

Client Sample ID:	Method Blank	Client:	ECM Group
Date Received:	Not Applicable	Project:	Yolanda, 98-507-14, F&BI 601274
Date Extracted:	02/03/06	Lab ID:	06-244 mb
Date Analyzed:	02/03/06	Data File:	020304.D
Matrix:	water	Instrument:	GCMS5
Units:	ug/L (ppb)	Operator:	YA

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Dibromofluoromethane	102	75	141
1,2-Dichloroethane-d4	123	59	155
Toluene-d8	119	69	145
4-Bromofluorobenzene	112	75	151

Compounds:	Concentration ug/L (ppb)
Ethanol	<1,000
t-Butyl alcohol (TBA)	<5
Methyl t-butyl ether (MTBE)	<0.5
Ethyl t-butyl ether (ETBE)	<0.5
Diisopropyl ether (DIPE)	<0.5
t-Amyl methyl ether (TAME)	<0.5
Benzene	<0.5
Toluene	<0.5
Ethylbenzene	<0.5
m,p-Xylene	<1
o-Xylene	<0.5
1,2-Dichloroethane (EDC)	<0.5
1,2-Dibromoethane (EDB)	<0.5

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260B SIM

Client Sample ID:	Method Blank	Client:	ECM Group
Date Received:	Not Applicable	Project:	Yolanda, 98-507-14, F&BI 601274
Date Extracted:	02/06/06	Lab ID:	06-258 mb
Date Analyzed:	02/06/06	Data File:	020617.D
Matrix:	water	Instrument:	GCMS5
Units:	ug/L (ppb)	Operator:	YA

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Dibromofluoromethane	89	75	141
1,2-Dichloroethane-d4	138	59	155
Toluene-d8	105	69	145
4-Bromofluorobenzene	91	75	151

Compounds:	Concentration ug/L (ppb)
Ethanol	<1,000
t-Butyl alcohol (TBA)	<5
Methyl t-butyl ether (MTBE)	<0.5
Ethyl t-butyl ether (ETBE)	<0.5
Diisopropyl ether (DIPE)	<0.5
t-Amyl methyl ether (TAME)	<0.5
Benzene	<0.5
Toluene	<0.5
Ethylbenzene	<0.5
m,p-Xylene	<1
o-Xylene	<0.5
1,2-Dichloroethane (EDC)	<0.5
1,2-Dibromoethane (EDB)	<0.5

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 02/16/06

Date Received: 01/31/06

Project: Yolanda, 98-507-14, F&BI 601274

**QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF WATER
SAMPLES FOR TOTAL PETROLEUM HYDROCARBONS AS GASOLINE
USING EPA METHOD 8015M**

Laboratory Code: 602052-01 (Duplicate)

Analyte	Reporting Units	Sample Result	Duplicate Result	Relative Percent Difference (Limit 20)
Gasoline	µg/L (ppb)	<100	<100	nm

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Gasoline	µg/L (ppb)	1,000	80	63-129

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 02/16/06

Date Received: 01/31/06

Project: Yolanda, 98-507-14, F&BI 601274

**QUALITY ASSURANCE RESULTS FOR THE ANALYSIS
OF WATER SAMPLES FOR VOLATILES BY EPA METHOD 8260B SIM**

Laboratory Code: 601274-01 (Duplicate)

Analyte	Reporting Units	Sample Result	Duplicate Result	Relative Percent Difference (Limit 20)
Ethanol	µg/L (ppb)	<1,000	<1,000	nm
t-Butyl alcohol (TBA)	µg/L (ppb)	<5	<5	nm
Methyl t-butyl ether (MTBE)	µg/L (ppb)	93	90	3
Diisopropyl ether (DIPE)	µg/L (ppb)	<0.5	<0.5	nm
Ethyl t-butyl ether (ETBE)	µg/L (ppb)	<0.5	<0.5	nm
t-Amyl methyl ether (TAME)	µg/L (ppb)	1.4	1.3	4
Benzene	µg/L (ppb)	<0.5	<0.5	nm
Toluene	µg/L (ppb)	<0.5	<0.5	nm
Ethylbenzene	µg/L (ppb)	<0.5	<0.5	nm
m,p-Xylene	µg/L (ppb)	<1	<1	nm
o-Xylene	µg/L (ppb)	<0.5	<0.5	nm
1,2-Dichloroethane (EDC)	µg/L (ppb)	<0.5	<0.5	nm
1,2-Dibromoethane (EDB)	µg/L (ppb)	<0.5	<0.5	nm

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Ethanol	µg/L (ppb)	500	149	55-151
t-Butyl alcohol (TBA)	µg/L (ppb)	50	82	49-144
Methyl t-butyl ether (MTBE)	µg/L (ppb)	10	77	69-126
Diisopropyl ether (DIPE)	µg/L (ppb)	10	82	68-138
Ethyl t-butyl ether (ETBE)	µg/L (ppb)	10	81	69-131
t-Amyl methyl ether (TAME)	µg/L (ppb)	10	74	70-127
Benzene	µg/L (ppb)	20	79	66-127
Toluene	µg/L (ppb)	20	82	67-133
Ethylbenzene	µg/L (ppb)	10	85	70-130
m,p-Xylene	µg/L (ppb)	10	86	70-130
Trichloroethene	µg/L (ppb)	20	80	70-130

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 02/16/06

Date Received: 01/31/06

Project: Yolanda, 98-507-14, F&BI 601274

**QUALITY ASSURANCE RESULTS FOR THE ANALYSIS
OF WATER SAMPLES FOR VOLATILES BY EPA METHOD 8260B SIM**

Laboratory Code: 601273-06 (Duplicate)

Analyte	Reporting Units	Sample Result	Duplicate Result	Relative Percent Difference (Limit 20)
Ethanol	µg/L (ppb)	<1,000	<1,000	nm
t-Butyl alcohol (TBA)	µg/L (ppb)	<5	<5	nm
Methyl t-butyl ether (MTBE)	µg/L (ppb)	3.1	3.0	3
Diisopropyl ether (DIPE)	µg/L (ppb)	<0.5	<0.5	nm
Ethyl t-butyl ether (ETBE)	µg/L (ppb)	<0.5	<0.5	nm
t-Amyl methyl ether (TAME)	µg/L (ppb)	<0.5	<0.5	nm
Benzene	µg/L (ppb)	6.7	6.5	3
Toluene	µg/L (ppb)	3.9	3.8	3
Ethylbenzene	µg/L (ppb)	1.2	1.2	0
m,p-Xylene	µg/L (ppb)	4.0	3.9	3
o-Xylene	µg/L (ppb)	3.7	3.6	3
1,2-Dichloroethane (EDC)	µg/L (ppb)	<0.5	<0.5	nm
1,2-Dibromoethane (EDB)	µg/L (ppb)	<0.5	<0.5	nm

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Ethanol	µg/L (ppb)	500	101	96	55-151	5
t-Butyl alcohol (TBA)	µg/L (ppb)	50	87	83	49-144	4
Methyl t-butyl ether (MTBE)	µg/L (ppb)	10	93	90	69-126	4
Diisopropyl ether (DIPE)	µg/L (ppb)	10	91	85	68-138	6
Ethyl t-butyl ether (ETBE)	µg/L (ppb)	10	91	88	69-131	4
t-Amyl methyl ether (TAME)	µg/L (ppb)	10	90	87	70-127	3
Benzene	µg/L (ppb)	20	94	90	66-127	4
Toluene	µg/L (ppb)	20	94	92	67-133	2
Ethylbenzene	µg/L (ppb)	10	98	95	70-130	3
m,p-Xylene	µg/L (ppb)	10	106	109	70-130	3

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

601274

SAMPLE CHAIN OF CUSTODY

ME 01-31-06

15

Send Report To JIM GREEN
 Company ECM Group
 Address PO Box 802
 City, State, ZIP Benicia, CA 94510
 Phone # (707) 751-0655 Fax # (707) 751-0653

<u>SAMPLERS (signature)</u>		Page # <u>1</u> of <u>3</u>	
PROJECT NAME/NO. <u>YOLANDA</u> <u>98-507-14</u>		PO #	TURNAROUND TIME
REMARKS <u>SUBMIT AS EDF</u>		<input checked="" type="checkbox"/> Standard (2 Weeks) <input type="checkbox"/> RUSH <small>Rush charges authorized by:</small>	
		SAMPLE DISPOSAL <input type="checkbox"/> Dispose after 30 days <input type="checkbox"/> Return samples <input type="checkbox"/> Will call with instructions	

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of containers	ANALYSES REQUESTED						Notes
						TPH-Diesel	TPH-Gasoline	BTEX by 8260B	Fuel Oxygenates	Lead Scavengers		
MW-24 d 25	01 A-D	1/25/06	10:20		4	X	X	X	X			
MW-24 d 25	02 A-D	1/25/06	10:36		4	X	X	X	X			
MW-24 d 145	03 A-D	1/25/06	10:45		4	X	X	X	X			
MW-24 d 180	04 A-D	1/25/06	10:55		4	X	X	X	X			
MW-25 d 25	05 A-D	1/25/06	13:20		4	X	X	X	X			
MW-25 d 75	06 A-D	1/25/06	13:30		4	X	X	X	X			
MW-25 d 145	07 A-D	1/25/06	13:40		4	X	X	X	X			
MW-25 d 180	08 A-D	1/25/06	13:50		4	X	X	X	X			
MW-25 d 230	09 A-D	1/25/06	14:05		4	X	X	X	X			
MW-28 d 25	10 A-D	1/27/06	11:45		4					X		

Friedman & Bruya, Inc.
 3012 16th Avenue West
 Seattle, WA 98119-2029
 Ph. (206) 285-8282
 Fax (206) 283-5044

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: <u>Michael S. Jackson</u>	MICHAEL S. JACKSON	ECM GROUP		
Received by: <u>Nhan Phan</u>	Nhan Phan	FBI	1/31/06	09:00
Relinquished by:				
Received by:				

601274

SAMPLE CHAIN OF CUSTODY

ME 01-31-06

V5-

Send Report To JIM GREEN

Company ECM Group

Address PO Box 802

City, State, ZIP Benicia, CA 94510

Phone # (707) 751-0655 Fax # (707) 751-0653

SAMPLER'S (signature)

PROJECT NAME/NO.

YOLANDA

98-507-14

PO #

REMARKS

SUBMIT AS EDF

Page # 2 of 3

TURNAROUND TIME

Standard (2 Weeks)

RUSH

Rush charges authorized by:

SAMPLE DISPOSAL

Dispose after 30 days

Return samples

Will call with instructions

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of containers	ANALYSES REQUESTED						Notes
						TPH-Diesel	TPH-Gasoline	BTEX by 8260B	Fuel Oxygenates	Lead Scavengers		
MW-28 d 75	11 A-D	1/27/06	11:55	W	4				X X			
MW-28 d 145	12 A-D	1/27/06	12:50	W	4				X X			
MW-28 d 180	13 A-D	1/27/06	12:20	W	4				X X			
MW-29 d 25	14 A-D	1/27/06	10:35	W	4				X X			
MW-29 d 75	15 A-D	1/27/06	10:45	W	4				X X			
MW-29 d 145	16 A-D	1/27/06	10:55	W	4				X X			
MW-29 d 180	17 A-D	1/27/06	11:05	W	4				X X			
MW-30 d 25	18 A-D	1/25/06	11:40	W	4				X X			
MW-30 d 75	19 A-D	1/25/06	11:50	W	4				X X			
MW-30 d 145	20 A-D	1/25/06	12:10	W	4				X X			

Friedman & Bruya, Inc.
3012 16th Avenue West

Seattle, WA 98119-2029

Ph. (206) 285-8282

Fax (206) 283-5044

SIGNATURE

PRINT NAME

COMPANY

DATE

TIME

Relinquished by:

Received by:

Relinquished by:

Received by:

Michael S. Jackson

Nhan Phan

ECM GROUP

FBI

1/31/06 09:00

601274

Send Report To Jim Green

Company ECM Group

Address PO Box 802

City, State, ZIP Benicia, CA 94510

Phone # (707) 751-0655 Fax # (707) 751-0653

SAMPLE CHAIN OF CUSTODY

ME 01-31-06

15

Page # 1 of 1

TURNAROUND TIME

681-118W-12

Standard (2 Weeks)
 RUSH

RUSH _____

SAMPLE DISPOSAL

Dispose after 30 days

Return samples

Will call with instructions

Friedman & Bruya, Inc.
3012 16th Avenue West

Seattle, WA 98119-2029

Ph. (206) 285-8282

Fax (206) 283-5044

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: <i>M. Jackson</i>	MICHAEL S. JACKSON Nhan Phan	ECM GROUP FeBT	1/31/06	09:00
Received by: <i>M. Jackson</i>				
Relinquished by: <i>M. Jackson</i>				
Received by: <i>M. Jackson</i>				

APPENDIX D

WATER SAMPLING DATA SHEETS

WATER LEVEL &
PRODUCT MEASUREMENTS

ECM group

PROJECT NAME & NUMBER: Yolanda
98-507-14

DATE: 2-1-06
BY: DJ/JH

WELL ID	TIME MEASURED	DEPTH TO PRODUCT (ft)	DEPTH TO WATER (ft)	TOTAL DEPTH	COMMENTS: (well condition, odor, etc.)
MW-1			8.69		
MW-2			10.22		
MW-3			10.23		
MW-4			9.81		
MW-5			7.54		
MW-5A			8.60		
MW-7			10.15		
MW-8			10.42		
MW-9			8.65		
MW-10			10.04		
MW-11			12.83		
MW-12			13.53		
MW-15			9.61		
MW-16			9.92		

WATER LEVEL &
PRODUCT MEASUREMENTS

ECM group

PROJECT NAME & NUMBER: Yolanda
98-507-14

DATE: 2-1-06
BY: DV/JH

WELL ID	TIME MEASURED	DEPTH TO PRODUCT (ft)	DEPTH TO WATER (ft)	TOTAL DEPTH	COMMENTS: (well condition, odor, etc.)
MW-17			surface ████████		Surface flooding - ATU not measured
MW-18			8.09		
MW-19			7.02		
MW-20 d 25					
MW-21			12.30		
MW-21 d 25					
MW-21 d 75			10.28		
MW-21 d 75			11.00		
MW-21 d 145					
MW-21 d 180			12.79		
MW-22 d 25					
MW-22 d 75			11.03		
MW-22 d 145					
MW-22 d 165			12.32		
MW-22 d 25					
MW-22 d 75			12.46		
MW-23 d 25					
MW-23 d 75			12.46		
MW-23 d 145					
MW-23 d 165			13.30		
MW-23 d 25					
MW-23 d 75			13.39		

WATER LEVEL &
PRODUCT MEASUREMENTS

ECM group

PROJECT NAME & NUMBER: Yolanda
98-507-14

DATE: 2-1-06
BY: DW-JH

WELL ID	TIME MEASURED	DEPTH TO PRODUCT (ft)	DEPTH TO WATER (ft)	TOTAL DEPTH	COMMENTS: (well condition, odor, etc.)
MW-23					
d 145			13.75		
MW-23					
180			13.77		
MW-24					
d 25			14.74		
MW-24					
d 75			13.92		
MW-24					
d 145			14.95		
MW-24					
d 180			14.45		
MW-25					
d 25			12.23		
MW-25					
d 75			14.19		
MW-25					
d 145			14.29		
MW-25					
d 180			14.23		
MW 25					
230			14.45		
MW-26					
d 25			18.11		
MW-26					
d 75			18.35		
MW 26					
d 145			20.70		

WATER LEVEL &
PRODUCT MEASUREMENTS

ECM group

PROJECT NAME & NUMBER: Yolanda
98-50714DATE: 2-1-06
BY: DW/JH

WELL ID	TIME MEASURED	DEPTH TO PRODUCT (ft)	DEPTH TO WATER (ft)	TOTAL DEPTH	COMMENTS: (well condition, odor, etc.)
MW 26					
180			20.69		
MW 27					
d 25			7.47		
MW 27					
d 75			8.90		
MW 27					
d 145			10.44		
MW 27					
180			10.44 +4.11		
MW 27					
230			14.11		
MW 28					
d 25			15.05		
MW 28					
d 75			15.04		
MW 28					
d 145			15.00		
MW 28					
180			14.92		
MW 29					
d 25			12.76		
MW 29					
d 75			13.55		
MW 29					
d 145			20.52		
MW 29					
d 180			20.51		

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WATER LEVEL & PRODUCT MEASUREMENTS

ECM group

PROJECT NAME & NUMBER: Yolanda
98-507-14

DATE: 2-1-06

BY: DW/JH

WATER SAMPLING DATA

Job Name Yolanda Job Number 98-307-14Well Number MW-26 Date 2-1-06 Time _____

Well Diameter _____ Well Depth (spec.) _____ Well Depth (sounded) _____

Depth to Water (static) _____ TOC elev. _____

G.W. Elev. _____ Maximum Drawdown Limit (if applicable) _____

Initial height of water in casing _____ Volume _____ gallons

Total to be evacuated = 3 x Initial Volume _____ gallons

Stop Time Start Time Bailed Pumped Cum. Gal.

Pumped or Bailed Dry? Yes No After _____ gallons Recovery Rate _____

Water color _____ Odor _____

Description of sediments or material in sample: _____

Additional Comments: _____

CHEMICAL DATA

Reading No. 25° 75° 75° 145° 145° 145° 7°

Time _____

Gallons _____

Temp. (degree F) 59.4 59.7 60.9 60.5 61.2 61.3

pH 7.01 6.46 6.72 6.53 6.53 6.91

EC (umhos/cm) 16.62 915 679 521 585 509

Special Conditions _____

SAMPLES COLLECTED

Sample ID ml Bottle/ cap Filtered (size, u) Preservative (type) Refrig. (R, NR) Lab (Init) Analysis Requested

Oxygenates

Pb scavenger

Bottles: P = Polyethylene; Pp = Polypropylene; C or B = Clear/Brown Glass; O = Other (describe)
Cap Codes: Py = Polyseal; V = VOA/Teflon septe; M = Metal

1082

WATER SAMPLING DATA

Job Name YOLANDA Job Number 98-507-#
 Well Number MW-26 Date 2-1-06 Time _____
 Well Diameter _____ Well Depth (spec.) _____ Well Depth (sounded) _____
 Depth to Water (static) _____ TOC elev. _____
 G.W. Elev. _____ Maximum Drawdown Limit (if applicable) _____

Initial height of water in casing _____ Volume _____ gallons
 Total to be evacuated = $3 \times$ Initial Volume _____ gallons

<u>Stop Time</u>	<u>Start Time</u>	<u>Bailed</u>	<u>Pumped</u>	<u>Cum. Gal</u>

Pumped or Bailed Dry? Yes No After _____ gallons Recovery Rate _____
 Water color _____ Odor _____

Description of sediments or material in sample: _____

Additional Comments: _____

CHEMICAL DATA

Reading No.	180	180	180	4	5	6	7
-------------	-----	-----	-----	---	---	---	---

Time _____

Gallons _____

Temp. (degree F)	61.0	61.0	66.9				
------------------	------	------	------	--	--	--	--

pH	6.34	6.28	6.47				
----	------	------	------	--	--	--	--

EC (umhos/cm)	544	460	430				
---------------	-----	-----	-----	--	--	--	--

Special Conditions _____

SAMPLES COLLECTED

Sample ID ml	Bottle/ cap	Filtered (size, u)	Preservative (type)	Refrig. (R, NR)	Lab (Init)	Analysis Requested

Bottles: P = Polyethylene; Pp = Polypropylene; C or B = Clear/Brown Glass; O = Other (describe)
 Cap Codes: Py = Polyseal; V = VDA/Teflon septa; M = Metal

202

WATER SAMPLING DATA

Job Name Yolande Job Number 98-507-14
 Well Number MW-27 Date 2-1-06 Time _____
 Well Diameter _____ Well Depth (spec.) _____ Well Depth (sounded) _____
 Depth to Water (static) _____ TOC elev. _____
 G.W. Elev. _____ Maximum Drawdown Limit (if applicable) _____

Initial height of water in casing _____ Volume _____ gallons
 Total to be evacuated = $3 \times$ Initial Volume _____ gallons

<u>Stop Time</u>	<u>Start Time</u>	<u>Bailed</u>	<u>Pumped</u>	<u>Cum. Gal.</u>

Pumped or Bailed Dry? Yes No After _____ gallons Recovery Rate _____
 Water color _____ Odor _____

Description of sediments or material in sample: _____

Additional Comments: _____

<u>CHEMICAL DATA</u>	<u>25</u>	<u>75</u>	<u>75</u>	<u>145</u>	<u>145</u>	<u>145</u>	
Reading No.	<u>7</u>	<u>2</u>	<u>8</u>	<u>4</u>	<u>8</u>	<u>8</u>	<u>7</u>
Time							
Gallons							
Temp. (degree F)	<u>61.5</u>	<u>64.9</u>	<u>65.9</u>	<u>63.6</u>	<u>65.1</u>	<u>65.2</u>	
pH	<u>7.13</u>	<u>6.91</u>	<u>6.73</u>	<u>6.56</u>	<u>6.27</u>	<u>6.25</u>	
EC (umhos/cm)	<u>746</u>	<u>949</u>	<u>955</u>	<u>514</u>	<u>474</u>	<u>468</u>	
Special Conditions							

<u>SAMPLES COLLECTED</u>						
<u>Sample ID ml</u>	<u>Bottle/ cap</u>	<u>Filtered (size, u)</u>	<u>Preservative (type)</u>	<u>Refrig. (R, NR)</u>	<u>Lab (Init)</u>	<u>Analysis Requested</u>
						<u>TPH(6A, BTEX)</u>
						<u>Oxygenads,</u> <u>Pb Scavengers</u>

Bottles: P = Polyethylene; Pp = Polypropylene; C or B = Clear/Brown Glass; O = Other (describe)
 Cap Codes: Py = Polysesal; V = VOA/Teflon septa; M = Metal

WATER SAMPLING DATA

Job Name 98-507 - Younger Job Number 98-507-14
 Well Number MW-27 Date 2-1-06 Time _____
 Well Diameter _____ Well Depth (spec.) _____ Well Depth (sounded) _____
 Depth to Water (static) _____ TOC elev. _____
 G.W. Elev. _____ Maximum Drawdown Limit (if applicable) _____

Formulas/Conversions:

r = well radius in ft
 h = hr of water col. in ft
 vol. in cyl. = $\pi r^2 h$
 7.48 gal/ft³
 $V_{1/2}$ casing = 0.163 gal/ft
 $V_{1/4}$ casing = 0.367 gal/ft
 $V_{3/4}$ casing = 0.653 gal/ft
 $V_{1 1/2}$ casing = 1.826 gal/ft
 $V_{2 1/2}$ casing = 3.47 gal/ft

<u>Stop Time</u>	<u>Start Time</u>	<u>Bailed</u>	<u>Pumped</u>	<u>Cum. Gal.</u>

Pumped or Bailed Dry? Yes No After gallons Recovery Rate
 Water color Odor

Description of sediments or material in sample:

Additional Comments:

<u>CHEMICAL DATA</u>	<u>180</u>	<u>180</u>	<u>180</u>	<u>230</u>	<u>230</u>	<u>230</u>	<u>230</u>
Reading No.	180	2	2	4	5	5	7
Time							
Gallons							
Temp. (degree F)	64.7	65.2	65.1	64.1	64.9	63.4	
pH	6.42	6.23	6.42	6.43	6.10	6.21	
EC (umhos/cm)	555	520	524	477	486	515	
Special Conditions							

SAMPLES COLLECTED

<u>Sample ID ml</u>	<u>Bottle/ cap</u>	<u>Filtered (size, u)</u>	<u>Preservative (type)</u>	<u>Refrig. (R, NR)</u>	<u>Lab (Init)</u>	<u>Analysis Requested</u>

Bottles: P = Polyethylene; Pp = Polypropylene; C or B = Clear/Brown Glass; O = Other (describe)
 Cap Codes: Py = Polyseal; V = VOA/Teflon septa; M = Metal

FIELD REPORT

Project Number Yorana A Project Name 98-507-14 (ESOW)

Date 1/27/06

Name M. JACKSON

Project Manager _____

Activity Description

GNE-1 - 9.26	OFF	PMC-1 - N/A
GNE-2 - 10.88	OFF	PNC-2 - 13.95
GNE-3 - 22.75		PMG-3 - 11.40
GNE-4 - 8.57	OFF	PMC-4 - 23.27
GNE-5 - 10.49	OFF	PMC-5 - 23.79
GNE-6 - 12.40		PMC-6 - 8.21
GNE-7 -	N/A	
GNE-8 -	21.15	
GNE-9 -	N/A	
GNE-10 -	7.48	

WATER SAMPLING DATA

Job Name YOLANDAJob Number 98-507-14Well Number MW-1Date 1/24/06

Time _____

Well Diameter 2"

Well Depth (spec.) _____

Well Depth (sounded) 22.50Depth to Water (static) 8.42

TOC elev. _____

G.W. Elev. _____

Maximum Drawdown Limit (if applicable) _____

Initial height of water in casing 14.08Volume 2.29 gallons

Total to be evacuated = 3 x Initial Volume

6.87 gallons

Formulas/Conversions

 $r = \text{well radius in ft}$ $h = \text{ht of water col. in ft}$ $\text{vol. in cyl.} = \pi r^2 h$ $7.48 \text{ gal}/\text{ft}^3$ $V_1 \text{ " casing} = 0.163 \text{ gal}/\text{ft}$ $V_2 \text{ " casing} = 0.367 \text{ gal}/\text{ft}$ $V_3 \text{ " casing} = 0.653 \text{ gal}/\text{ft}$ $V_4 \text{ " casing} = 1.026 \text{ gal}/\text{ft}$ $V_5 \text{ " casing} = 1.47 \text{ gal}/\text{ft}$

Stop Time _____

Start Time _____

Bailed _____

Pumped _____

Cum. Gal. _____

Pumped or Bailed Dry? Yes No

After _____ gallons

Recovery Rate _____

Water color _____

Odor _____

Description of sediments or material in sample: _____

Additional Comments: _____

CHEMICAL DATA

Reading No. 1 2 3 4 5 6 7

Time _____

Gallons _____

Temp. (degree F) 69.0 67.2 67.6pH 7.30 7.14 6.95EC (umhos/cm) 1183 1086 1160

Special Conditions _____

SAMPLES COLLECTED

Sample ID ml	Bottle/ cap	Filtered (size, u)	Preservative (type)	Refrig. (R, NR)	Lab (Init)	Analysis Requested
_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____

Bottles: P = Polyethylene; Pp = Polypropylene; C or B = Clear/Brown Glass; O = Other (describe)

Cap Codes: Py = Polyseal; V = VOA/Teflon septe; M = Metal

13:00

WATER SAMPLING DATA

Job Name YOKANDA Job Number 98-507-14
 Well Number MN-2 Date 1/23/06 Time _____
 Well Diameter 8" Well Depth (spec.) _____ Well Depth (sounded) 23.25
 Depth to Water (static) 10.15 TOC elev. _____
 G.W. Elev. _____ Maximum Drawdown Limit (if applicable) _____

Formulas/Conversions

r = well radius in ft
 h = ht of water col. in ft
 vol. in cyl. = $\pi r^2 h$
 7.48 gal/lit
 V_1 " casing = 0.163 gal/lit
 V_2 " casing = 0.367 gal/lit
 V_3 " casing = 0.653 gal/lit
 V_4 " casing = 0.826 gal/lit
 V_5 " casing = 1.47 gal/lit

Initial height of water in casing 13.10 Volume 2.13 gallons
 Total to be evacuated = $3 \times$ Initial Volume 6.40 gallons

Stop Time	Start Time	Bailed	Pumped	Cum. Gal.

Pumped or Bailed-Dry? Yes No After _____ gallons Recovery Rate _____
 Water color _____ Odor _____

Description of sediments or material in sample: _____

Additional Comments: _____

CHEMICAL DATA

Reading No.	1	2	3	4	5	6	7
Time							
Gallons							
Temp. (degree F)	<u>67.8</u>	<u>68.0</u>	<u>68.3</u>				
pH	<u>7.04</u>	<u>7.00</u>	<u>6.60</u>				
EC (umhos/cm)	<u>1097</u>	<u>1082</u>	<u>1108</u>				
Special Conditions:							

SAMPLES COLLECTED

Sample ID ml	Bottle/ cap	Filtered (size, u)	Preservative (type)	Refrig. (R, NR)	Lab (Init)	Analysis Requested

Bottles: P = Polyethylene; Pp = Polypropylene; C or B = Clear/Brown Glass; O = Other (describe)
 Cap Codes: Py = Polysseal; V = VOA/Teflon septa; M = Metal

12,40

WATER SAMPLING DATA

Job Name YOHANDA Job Number 98-507-14
 Well Number MW-3 Date 1/23/06 Time _____
 Well Diameter 2" Well Depth (spec.) _____ Well Depth (sounded) 30.45
 Depth to Water (static) 9.36 TOC elev. _____
 G.W. Elev. _____ Maximum Drawdown Limit (if applicable) _____

Initial height of water in casing 21.09 Volume 3.43 gallons
 Total to be evacuated = $3 \times$ Initial Volume 10.31 gallons

Stop Time	Start Time	Bailed	Pumped	Cum. Gal.

Pumped or Bailed Dry? Yes No After _____ gallons Recovery Rate _____
 Water color _____ Odor _____

Description of sediments or material in sample: _____

Additional Comments: _____

CHEMICAL DATA

Reading No.	1	2	3	4	5	6	7
Time							

Gallons						
Temp. (degree F)	<u>70.0</u>	<u>70.1</u>	<u>71.2</u>			

pH						
<u>6.82</u>	<u>6.57</u>	<u>6.67</u>				

EC (umhos/cm)						
<u>1165</u>	<u>1072</u>	<u>1057</u>				

Special Conditions: _____

SAMPLES COLLECTED

Sample ID ml	Bottle/ cap	Filtered (size, u)	Preservative (type)	Refrig. (R, NR)	Lab (Init)	Analysis Requested

Bottles: P = Polyethylene; Pp = Polypropylene; C or B = Clear/Brown Glass; O = Other (describe)
 Cap Codes: Py = Polyseal; V = VOA/Teflon septe; M = Metal

11,95

WATER SAMPLING DATA

Job Name YOLANDAJob Number 98-507-14Well Number MW-4Date 1/23/06

Time _____

Well Diameter 2"

Well Depth (spec.) _____

Well Depth (sounded) 23.35Depth to Water (static) 10.13 TOC elev. _____

G.W. Elev. _____

Maximum Drawdown Limit (if applicable) _____

Initial height of water in casing 13.22Volume 2.15 gallons

Total to be evacuated = 3 x Initial Volume

10.56 gallons

Formulas/Conversions

 $r = \text{well radius in ft}$ $h = \text{ht of water col. in ft}$ $\text{vol. in cyl.} = \pi r^2 h$ $7.48 \text{ gal}/\text{ft}^3$ $V_{1/2} \text{ casing} = 11.163 \text{ gal}/\text{ft}$ $V_{1/4} \text{ casing} = 11.367 \text{ gal}/\text{ft}$ $V_{3/4} \text{ casing} = 11.653 \text{ gal}/\text{ft}$ $V_{1} \text{ casing} = 11.826 \text{ gal}/\text{ft}$ $V_{1 1/2} \text{ casing} = 1.47 \text{ gal}/\text{h}$

<u>Stop Time</u>	<u>Start Time</u>	<u>Bailed</u>	<u>Pumped</u>	<u>Cum. Gal.</u>

Pumped or Bailed Dry? Yes No After _____ gallons Recovery Rate _____

Water color _____

Odor _____

Description of sediments or material in sample: _____

Additional Comments: _____

CHEMICAL DATA

Reading No.	1	2	3	4	5	6	7
-------------	---	---	---	---	---	---	---

Time _____

Gallons _____

Temp. (degree F) 66.4 66.0 65.6pH 7.63 7.51 7.30EC (umhos/cm) 529 436 563

Special Conditions _____

SAMPLES COLLECTED

Sample ID ml	Bottle/ cap	Filtered (size, u)	Preservative (type)	Refrig. (R, NR)	Lab (Init)	Analysis Requested
--------------	-------------	--------------------	---------------------	-----------------	------------	--------------------

Bottles: P = Polyethylene; Pp = Polypropylene; C or B = Clear/Brown Glass; O = Other (describe)
 Cap Codes: Py = Polyseal; V = VCA/Teflon septe; M = Metal

10:55

WATER SAMPLING DATA

Job Name YONANDA Job Number 98-507-14
 Well Number MN-7 Date 1/23/06 Time _____
 Well Diameter 21" Well Depth (spec.) _____ Well Depth (sounded) 58.20
 Depth to Water (static) 11.98 TOC elev. _____
 G.W. Elev. _____ Maximum Drawdown Limit (if applicable) _____

Formulas/Comments:
 $r = \text{well radius in ft}$
 $h = \text{ht of water col. in ft}$
 $\text{vol. in cyl.} = \pi r^2 h$
 $7.48 \text{ gal}/\text{ft}^3$
 $V_1 \text{ casing} = 0.163 \text{ gal}/\text{ft}$
 $V_2 \text{ casing} = 0.367 \text{ gal}/\text{ft}$
 $V_3 \text{ casing} = 0.653 \text{ gal}/\text{ft}$
 $V_4 \text{ casing} = 0.826 \text{ gal}/\text{ft}$
 $V_5 \text{ casing} = 1.47 \text{ gal}/\text{ft}$

Initial height of water in casing 46.22 Volume 7.53 gallons
 Total to be evacuated = $3 \times$ Initial Volume 22.60 gallons

Stop Time	Start Time	Bailed	Pumped	Cum. Gal.

Pumped or Bailed Dry? Yes No After _____ gallons Recovery Rate _____
 Water color _____ Odor _____

Description of sediments or material in sample: _____

Additional Comments: _____

CHEMICAL DATA

Reading No.	1	2	3	4	5	6	7
-------------	---	---	---	---	---	---	---

Time _____

Gallons _____

Temp. (degree F) 68.4 69.2 70.6

pH 7.45 7.56 7.78

EC (umhos/cm) 1204 1203 1204

Special Conditions: _____

SAMPLES COLLECTED

Sample ID ml	Bottle/ cap	Filtered (size, u)	Preservative (type)	Refrig. (R, NR)	Lab (Init)	Analysis Requested
--------------	-------------	--------------------	---------------------	-----------------	------------	--------------------

Bottles: P = Polyethylene; Pp = Polypropylene; C or B = Clear/Brown Glass; O = Other (describe)
 Cap Codes: Py = Polyseal; V = VOA/Teflon septa; M = Metal

11:20

WATER SAMPLING DATA

Job Name YOLANDAJob Number 98-507-14Well Number MW-9Date 1/24/06

Time _____

Well Diameter 2"

Well Depth (spec.) _____

Well Depth (sounded) 24.90Depth to Water (static) 10.02 TOC elev. _____

G.W. Elev. _____ Maximum Drawdown Limit (if applicable) _____

Initial height of water in casing 14.88Volume 24.2 gallons

Total to be evacuated = 3 x Initial Volume

7.27 gallons

Stop Time _____

Start Time _____

Bailed _____

Pumped _____

Cum. Gal. _____

Pumped or Bailed Dry? X Yes No After _____ gallons Recovery Rate _____

Water color _____ Odor _____

Description of sediments or material in sample: _____

Additional Comments: _____

CHEMICAL DATA

Reading No. 1 2 3 4 5 6 7

Time _____

Gallons _____

Temp. (degree F) 64.6 64.2 64.7pH 7.75 7.47 6.84EC (umhos/cm) 766 738 648

Special Conditions: _____

SAMPLES COLLECTED

Sample ID ml	Bottle/ cap	Filtered (size, u)	Preservative (type)	Refrig. (R, NR)	Lab (Init)	Analysis Requested
_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____

Bottles: P = Polyethylene; Pp = Polypropylene; C or B = Clear/Brown Glass; O = Other (describe)

Cap Codes: Py = Polyseal; V = VOA/Teflon septa; M = Metal

13:20

WATER SAMPLING DATA

Job Name YOLANDA Job Number 98-507-14
 Well Number MN-10 Date 1/23/06 Time _____
 Well Diameter 2" Well Depth (spec.) _____ Well Depth (sounded) 20.85
 Depth to Water (static) 10.13 TOC elev. _____
 G.W. Elev. _____ Maximum Drawdown Limit (if applicable) _____

Burnside's/Conversion

$r = \text{well radius in ft}$
 $h = \text{ht of water col. in ft}$
 $\text{vol. in cyl.} = \pi r^2 h$
 $7.48 \text{ gal}/\text{ft}^3$
 $V_1" \text{ casing} = 0.163 \text{ gal}/\text{ft}$
 $V_2" \text{ casing} = 0.367 \text{ gal}/\text{ft}$
 $V_3" \text{ casing} = 0.653 \text{ gal}/\text{ft}$
 $V_4" \text{ casing} = 1.026 \text{ gal}/\text{ft}$
 $V_5" \text{ casing} = 1.47 \text{ gal}/\text{ft}$

Stop Time	Start Time	Bailed	Pumped	Cum. Gal.

Pumped or Bailed Dry? Yes No After _____ gallons Recovery Rate _____
 Water color _____ Odor _____

Description of sediments or material in sample: _____

Additional Comments: _____

CHEMICAL DATA

Reading No.	1	2	3	4	5	6	7
-------------	---	---	---	---	---	---	---

Time _____

Gallons _____

Temp. (degree F) 65.1 65.6 65.5

pH 6.61 6.58 6.49

EC (umhos/cm) 1001 970 959

Special Conditions _____

SAMPLES COLLECTED

Sample ID ml	Bottle/ cap	Filtered (size, u)	Preservative (type)	Refrig. (R, NR)	Lab (Init)	Analysis Requested
--------------	-------------	--------------------	---------------------	-----------------	------------	--------------------

Bottles: P = Polyethylene; Pp = Polypropylene; C or B = Clear/Brown Glass; O = Other (describe)
 Cap Codes: Py = Polyseal; V = VOA/Teflon septa; M = Metal

10:40

WATER SAMPLING DATA

Job Name YOKANDA Job Number 98-507-14
 Well Number MW-21A 25 Date 1/23/06 Time _____
 Well Diameter MULTI-LEVEL Well Depth (spec.) _____ Well Depth (sounded) 25.00
 Depth to Water (static) 11.92 TOC elev. _____
 G.W. Elev. _____ Maximum Drawdown Limit (if applicable) _____

Formulas/Conversions

r = well radius in ft
 h = ht of water cyl. in ft
 vol. in cyl. = $\pi r^2 h$
 7.48 gal/ft³
 V_1 " casing = 0.163 gal/ft
 V_2 " casing = 0.367 gal/ft
 V_3 " casing = 0.653 gal/ft
 V_{12} " casing = 0.826 gal/ft
 V_4 " casing = 1.47 gal/ft

Initial height of water in casing 13.08 Volume 0.13 gallons
 Total to be evacuated = 3 x Initial Volume 0.39 gallons

<u>Stop Time</u>	<u>Start Time</u>	<u>Bailed</u>	<u>Pumped</u>	<u>Cum. Gal.</u>

Pumped or Bailed Dry? Yes No After _____ gallons Recovery Rate _____

Water color _____ Odor _____

Description of sediments or material in sample: _____

Additional Comments: _____

CHEMICAL DATA

Reading No.	1	2	3	4	5	6	7
Time							

Gallons: _____

Temp. (degree F) 74.9

pH 7.13

EC (umhos/cm) 1108

Special Conditions: _____

SAMPLES COLLECTED

Sample ID ml	Bottle/ cap	Filtered (size, u)	Preservative (type)	Refrig. (R, NR)	Lab (Init)	Analysis Requested

Bottles: P = Polyethylene; Pp = Polypropylene; C or B = Clear/Brown Glass; O = Other (describe)
 Cap Codes: Py = Polyseal; V = VOA/Teflon septa; M = Metal

12:30

WATER SAMPLING DATA

Job Name YOKANDAJob Number 98-507-14Well Number MN-21d75 Date 1/23/06

Time _____

Well Diameter MULTI-LEVEL

Well Depth (spec.) _____

Well Depth (sounded) 75.00Depth to Water (static) 11.64 TOC elev. _____

G.W. Elev. _____ Maximum Drawdown Limit (if applicable) _____

Initial height of water in casing 63.36Volume 0.63 gallons

Total to be evacuated = 3 x Initial Volume

1.90 gallons

<u>Stop Time</u>	<u>Start Time</u>	<u>Bailed</u>	<u>Pumped</u>	<u>Cum. Gal.</u>

Pumped or Bailed Dry? Yes No After _____ gallons Recovery Rate _____

Water color _____ Odor _____

Description of sediments or material in sample: _____

Additional Comments: _____

CHEMICAL DATA

Reading No. 1 2 3 4 5 6 7

Time _____

Gallons _____

Temp. (degree F) 67.6 67.3pH 7.00 6.96EC (umhos/cm) 1139 1146

Special Conditions: _____

SAMPLES COLLECTED

Sample ID ml	Bottle/ cap	Filtered (size, u)	Preservative (type)	Refrig. (R, NR)	Lab (Init)	Analysis Requested

Bottles: P = Polyethylene; Pp = Polypropylene; C or B = Clear/Brown Glass; O = Other (describe)
 Cap Codes: Py = Polyseal; V = VOA/Teflon septa; M = Metal

12:40

WATER SAMPLING DATA

Job Name YOKANDA Job Number 98-507-14
 Well Number MN-212 145 Date 11/23/04 Time _____
 Well Diameter MULTI-LEVEL Well Depth (spec.) _____ Well Depth (sounded) 145.00
 Depth to Water (static) 13.04 TOC elev. _____
 G.W. Elev. _____ Maximum Drawdown Limit (if applicable) _____

Formulas/Conversions

r = well radius in ft
 h = ht of water col. in ft
 vol. in cyl. = $\pi r^2 h$
 7.48 gal/ft³
 V_1 * casing = 0.163 gal/ft
 V_2 * casing = 0.367 gal/ft
 V_3 * casing = 0.653 gal/ft
 V_4 * casing = 1.026 gal/ft
 V_5 * casing = 1.47 gal/ft

<u>Stop Time</u>	<u>Start Time</u>	<u>Bailed</u>	<u>Pumped</u>	<u>Cum. Gal.</u>

Pumped or Bailed Dry? Yes No After _____ gallons Recovery Rate _____
 Water color _____ Odor _____

Description of sediments or material in sample: _____

Additional Comments: _____

CHEMICAL DATA

<u>Reading No.</u>	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>7</u>
<u>Time</u>							
<u>Gallons</u>							
<u>Temp. (degree F)</u>	<u>65.9</u>	<u>65.9</u>	<u>66.5</u>				
<u>pH</u>	<u>7.04</u>	<u>6.83</u>	<u>6.69</u>				
<u>EC (umhos/cm)</u>	<u>701</u>	<u>695</u>	<u>694</u>				

Special Conditions: _____

SAMPLES COLLECTED

<u>Sample ID ml</u>	<u>Bottle/ cap</u>	<u>Filtered (size, u)</u>	<u>Preservative (type)</u>	<u>Refrig. (R, NR)</u>	<u>Lab (Init)</u>	<u>Analysis Requested</u>

Bottles: P = Polyethylene; Pp = Polypropylene; C or B = Clear/Brown Glass; O = Other (describe)
 Cap Codes: Py = Polyseal; V = VOA/Teflon septa; M = Metal

12:50

WATER SAMPLING DATA

Job Name YOKANDA Job Number 98-507-14
 Well Number MW-21d 180 Date 1/23/06 Time _____
 Well Diameter MULTI-LEVEL Well Depth (spec.) _____ Well Depth (sounded) 180.00
 Depth to Water (static) 13.06 TOC elev. _____
 G.W. Elev. _____ Maximum Drawdown Limit (if applicable) _____

Formulas/Conversions
 $r = \text{well radius in ft}$
 $b = \text{ht of water col. in ft}$
 $\text{vol. in cyl.} = \pi r^2 b$
 $7.48 \text{ gal}/\text{ft}^3$
 $V_1 \text{ casing} = 0.163 \text{ gal}/\text{ft}$
 $V_2 \text{ casing} = 0.347 \text{ gal}/\text{ft}$
 $V_3 \text{ casing} = 0.653 \text{ gal}/\text{ft}$
 $V_{12} \text{ casing} = 0.826 \text{ gal}/\text{ft}$
 $V_4 \text{ casing} = 1.47 \text{ gal}/\text{ft}$

Stop Time	Start Time	Bailed	Pumped	Cum. Gal.

Pumped or Bailed Dry? Yes No After _____ gallons Recovery Rate _____
 Water color _____ Odor _____

Description of sediments or material in sample: _____

Additional Comments: _____

CHEMICAL DATA

Reading No.	1	2	3	4	5	6	7
Time							
Gallons							
Temp. (degree F)	<u>65.7</u>	<u>65.9</u>	<u>65.3</u>				
pH	<u>6.84</u>	<u>6.56</u>	<u>6.50</u>				
EC (umhos/cm)	<u>608</u>	<u>611</u>	<u>616</u>				

Special Conditions: _____

SAMPLES COLLECTED

Sample ID ml	Bottle/cap	Filtered (size, u)	Preservative (type)	Refrig. (R, NR)	Lab (Init)	Analysis Requested

Bottles: P = Polyethylene; Pp = Polypropylene; C or B = Clear/Brown Glass; O = Other (describe)
 Cap Codes: Py = Polyseal; V = VOA/Teflon septa; M = Metal

13.05

WATER SAMPLING DATA

Job Name YONANDA Job Number 98-507-14
 Well Number MW-22d 25 Date 1/24/06 Time _____
 Well Diameter MULTI-LEVEL Well Depth (spec.) _____ Well Depth (sounded) 25.00
 Depth to Water (static) 15.59 TOC elev. _____
 G.W. Elev. _____ Maximum Drawdown Limit (if applicable) _____

Initial height of water in casing 9.41 Volume 0.09 gallons
 Total to be evacuated = 3 x Initial Volume 0.28 gallons

Formulas/Conversions
 $r = \text{well radius in ft}$
 $b = \text{ht of water col. in ft}$
 $\text{vol. in cyl.} = \pi r^2 b$
 7.48 gal/ft^3
 $V_r = \text{casing} = 0.163 \text{ gal/ft}$
 $V_r = \text{casing} = 0.653 \text{ gal/ft}$
 $V_r = \text{casing} = 0.826 \text{ gal/ft}$
 $V_r = \text{casing} = 1.47 \text{ gal/ft}$

<u>Stop Time</u>	<u>Start Time</u>	<u>Bailed</u>	<u>Pumped</u>	<u>Cum. Gal.</u>

Pumped or Bailed Dry? Yes No After _____ gallons Recovery Rate _____
 Water color _____ Odor _____
 Description of sediments or material in sample: _____
 Additional Comments: _____

CHEMICAL DATA

Reading No.	1	2	3	4	5	6	7
Time							
Gallons							
Temp. (degree F)	<u>71.1</u>						
pH	<u>7.24</u>						
EC (umhos/cm)	<u>936</u>						
Special Conditions							

SAMPLES COLLECTED

Sample ID ml	Bottle/ cap	Filtered (size, u)	Preservative (type)	Refrig. (R, NR)	Lab (Init)	Analysis Requested

Bottles: P = Polyethylene; Pp = Polypropylene; C or B = Clear/Brown Glass; O = Other (describe)
 Cap Codes: Py = Polyseal; V = VOA/Teflon septa; M = Metal.

14.00

WATER SAMPLING DATA

Job Name YOLANDA Job Number 98-507-14
 Well Number MW-22d 75 Date 1/24/06 Time _____
 Well Diameter MULTI-LEVEL Well Depth (spec.) _____ Well Depth (sounded) 75.00
 Depth to Water (static) 12.44 TOC elev. _____
 G.W. Elev. _____ Maximum Drawdown Limit (if applicable) _____

Initial height of water in casing 62.56 Volume 0.62 gallons
 Total to be evacuated = 3 x Initial Volume 1.87 gallons

Formulas/Conversions
 $r = \text{well radius in ft}$
 $h = \text{ht of water col. in ft}$
 $\text{vol. in cyl.} = \pi r^2 h$
 7.48 gal/ft^3
 $V_{1/2} \text{ casing} = 0.163 \text{ gal/ft}$
 $V_{1/4} \text{ casing} = 0.167 \text{ gal/ft}$
 $V_{1/8} \text{ casing} = 0.653 \text{ gal/ft}$
 $V_{1/16} \text{ casing} = 0.826 \text{ gal/ft}$
 $V_{1/32} \text{ casing} = 1.47 \text{ gal/ft}$

<u>Stop Time</u>	<u>Start Time</u>	<u>Bailed</u>	<u>Pumped</u>	<u>Cum. Gal.</u>

Pumped or Bailed Dry? Yes No After _____ gallons Recovery Rate _____
 Water color _____ Odor _____
 Description of sediments or material in sample: _____
 Additional Comments: _____

CHEMICAL DATA

Reading No.	1	2	3	4	5	6	7
Time	_____						
Gallons	_____						
Temp. (degree F)	<u>66.0</u>	<u>66.0</u>					
pH	<u>6.59</u>	<u>6.47</u>					
EC (umhos/cm)	<u>1277</u>	<u>1305</u>					
Special Conditions	_____						

SAMPLES COLLECTED

Sample ID ml	Bottle/cap	Filtered (size, u)	Preservative (type)	Refrig. (R, NR)	Lab (Init)	Analysis Requested

Bottles: P = Polyethylene; Pp = Polypropylene; C or B = Clear/Brown Glass; O = Other (describe)
 Cap Codes: Py = Polyseal; V = VOA/Teflon septa; M = Metal.

14:16

WATER SAMPLING DATA

Job Name YOKANDA Job Number 98-507-14
 Well Number MW-22d 145 Date 1/24/06 Time _____
 Well Diameter MULTI-level Well Depth (spec.) _____ Well Depth (sounded) 145.00
 Depth to Water (static) 12.55 TOC elev. _____
 G.W. Elev. _____ Maximum Drawdown Limit (if applicable) _____

Initial height of water in casing 132.45 Volume 1.32 gallons
 Total to be evacuated = $3 \times$ Initial Volume 3.97 gallons

Formulas/Conversions
 $r = \text{well radius in ft}$
 $h = \text{ht of water col. in ft}$
 $\text{vol. in cyl.} = \pi r^2 h$
 $7.48 \text{ gal}/\text{ft}^3$
 $V_1 \text{ casing} = 0.163 \text{ gal}/\text{ft}$
 $V_2 \text{ casing} = 0.367 \text{ gal}/\text{ft}$
 $V_3 \text{ casing} = 0.653 \text{ gal}/\text{ft}$
 $V_{10} \text{ casing} = 0.826 \text{ gal}/\text{ft}$
 $V_{12} \text{ casing} = 1.47 \text{ gal}/\text{ft}$

<u>Stop Time</u>	<u>Start Time</u>	<u>Bailed</u>	<u>Pumped</u>	<u>Cum. Gal.</u>

Pumped or Bailed Dry? Yes No After _____ gallons Recovery Rate _____
 Water color _____ Odor _____
 Description of sediments or material in sample: _____
 Additional Comments: _____

CHEMICAL DATA

Reading No.	1	2	3	4	5	6	7	
Time	_____							
Gallons	_____							
Temp. (degree F)	<u>65.7</u>	<u>65.6</u>	<u>65.4</u>					
pH	<u>6.28</u>	<u>6.06</u>	<u>5.91</u>					
EC (umhos/cm)	<u>935</u>	<u>975</u>	<u>962</u>					
Special Conditions	_____							

SAMPLES COLLECTED

Sample ID ml	Bottle/cap	Filtered (size, u)	Preservative (type)	Refrig. (R, NR)	Lab (Init)	Analysis Requested

Bottles: P = Polyethylene; Pp = Polypropylene; C or B = Clear/Brown Glass; O = Other (describe)
 Cap Codes: Py = Polyseal; V = VOA/Teflon septa; M = Metal.

(9:05)

WATER SAMPLING DATA

Job Name YORANDA Job Number 98-507-14
 Well Number MN-22 & 165 Date 1/24/06 Time _____
 Well Diameter MULTI-LEVEL Well Depth (spec.) _____ Well Depth (sounded) 165.00
 Depth to Water (static) 12.56 TOC elev. _____
 G.W. Elev. _____ Maximum Drawdown Limit (if applicable) _____

Initial height of water in casing 152.44 Volume 1.52 gallons
 Total to be evacuated = $3 \times$ Initial Volume 4.57 gallons

Formulas/Conversions
 $r = \text{well radius in ft}$
 $h = \text{ht of water col. in ft}$
 $\text{vol. in cyl.} = \pi r^2 h$
 $7.48 \text{ gal}/\text{ft}^3$
 $V_1 \text{ " casing} = 0.163 \text{ gal}/\text{ft}$
 $V_2 \text{ " casing} = 0.367 \text{ gal}/\text{ft}$
 $V_3 \text{ " casing} = 0.653 \text{ gal}/\text{ft}$
 $V_{12} \text{ " casing} = 0.826 \text{ gal}/\text{ft}$
 $V_4 \text{ " casing} = 1.47 \text{ gal}/\text{ft}$

<u>Stop Time</u>	<u>Start Time</u>	<u>Bailed</u>	<u>Pumped</u>	<u>Cum. Gal.</u>

Pumped or Bailed Dry? Yes No After _____ gallons Recovery Rate _____
 Water color _____ Odor _____
 Description of sediments or material in sample: _____
 Additional Comments: _____

CHEMICAL DATA

Reading No.	1	2	3	4	5	6	7
Time							
Gallons							
Temp. (degree F)	66.2	65.7	65.7				
pH	6.29	6.00	5.75				
EC (umhos/cm)	9.71	9.67	9.48				
Special Conditions							

SAMPLES COLLECTED

Sample ID ml	Bottle/cap	Filtered (size, u)	Preservative (type)	Refrig. (R, NR)	Lab (Init)	Analysis Requested

Bottles: P = Polyethylene; Pp = Polypropylene; C or B = Clear/Brown Glass; O = Other (describe)
 Cap Codes: Py = Polyseal; V = VOA/Teflon septa; M = Metal

4:35

WATER SAMPLING DATA

Job Name YOLANDA Job Number 98-507-14
 Well Number MW-23d 25 Date 1/24/06 Time _____
 Well Diameter MULTI-LEVEL Well Depth (spec.) _____ Well Depth (sounded) 25.00
 Depth to Water (static) 13.72 TOC elev. _____
 G.W. Elev. _____ Maximum Drawdown Limit (if applicable) _____

Initial height of water in casing 11.28 Volume 0.11 gallons
 Total to be evacuated = 3 x Initial Volume 0.33 gallons

Formulas/Conversions
 $r = \text{well radius in ft}$
 $h = \text{ht of water col. in ft}$
 $\text{vol. in cyl.} = \pi r^2 h$
 7.48 gal/ft^3
 $V_1 \text{ casing} = 0.163 \text{ gal/ft}$
 $V_2 \text{ casing} = 0.367 \text{ gal/ft}$
 $V_3 \text{ casing} = 0.653 \text{ gal/ft}$
 $V_{10} \text{ casing} = 0.826 \text{ gal/ft}$
 $V_{15} \text{ casing} = 1.47 \text{ gal/ft}$

<u>Stop Time</u>	<u>Start Time</u>	<u>Bailed</u>	<u>Pumped</u>	<u>Cum. Gal</u>

Pumped or Bailed Dry? Yes No After _____ gallons Recovery Rate _____
 Water color _____ Odor _____
 Description of sediments or material in sample: _____
 Additional Comments: _____

CHEMICAL DATA

Reading No.	1	2	3	4	5	6	7
Time							
Gallons							
Temp. (degree F)	<u>67.5</u>						
pH	<u>6.77</u>						
EC (umhos/cm)	<u>598</u>						
Special Conditions							

SAMPLES COLLECTED

Sample ID ml	Bottle/ cap	Filtered (size, u)	Preservative (type)	Refrig. (R, NR)	Lab (Init)	Analysis Requested

Bottles: P = Polyethylene; Pp = Polypropylene; C or B = Clear/Brown Glass; O = Other (describe)
 Cap Codes: Py = Polyseal; V = VOA/Teflon septa; M = Metal.

15°/5

WATER SAMPLING DATA

Job Name YONANDA Job Number 98-507-14
 Well Number MW-23 d 75 Date 1/24/06 Time _____
 Well Diameter Multi-level Well Depth (spec.) _____ Well Depth (sounded) 75.00
 Depth to Water (static) 13.43 TOC elev. _____
 G.W. Elev. _____ Maximum Drawdown Limit (if applicable) _____

Formulas/Conversions

$r = \text{well radius in ft}$
 $b = \text{ht of water coll. in ft}$
 $\text{vol. in cyl.} = \pi r^2 b$
 7.48 gal/ft^3
 $V_1 = \text{casing} = 0.163 \text{ gal/ft}$
 $V_2 = \text{casing} = 0.387 \text{ gal/ft}$
 $V_3 = \text{casing} = 0.653 \text{ gal/ft}$
 $V_{45} = \text{casing} = 0.826 \text{ gal/ft}$
 $V_{12} = \text{casing} = 1.47 \text{ gal/ft}$

Initial height of water in casing 61.57 Volume 0.61 gallons
 Total to be evacuated = $3 \times$ Initial Volume 1.84 gallons

<u>Stop Time</u>	<u>Start Time</u>	<u>Bailed</u>	<u>Pumped</u>	<u>Cum. Gal</u>

Pumped or Bailed Dry? Yes No After _____ gallons Recovery Rate _____

Water color _____ Odor _____

Description of sediments or material in sample: _____

Additional Comments: _____

CHEMICAL DATA

Reading No.	1	2	3	4	5	6	7
Time							

Gallons							
---------	--	--	--	--	--	--	--

Temp. (degree F)	<u>65.6</u>	<u>65.4</u>					
------------------	-------------	-------------	--	--	--	--	--

pH	<u>6.18</u>	<u>6.25</u>					
----	-------------	-------------	--	--	--	--	--

EC (umhos/cm)	<u>1146</u>	<u>1192</u>					
---------------	-------------	-------------	--	--	--	--	--

Special Conditions _____

SAMPLES COLLECTED

Sample ID ml	Bottle/ cap	Filtered (size, u)	Preservative (type)	Refrig. (R, NR)	Lab (Init)	Analysis Requested

Bottles: P = Polyethylene; Pp = Polypropylene; C or B = Clear/Brown Glass; O = Other (describe)
 Cap Codes: Py = Polyseal; V = VOA/Teflon septa; M = Metal.

15:40

WATER SAMPLING DATA

Job Name YONANDA Job Number 98-507-14
 Well Number MN-23 d 145 Date 1/24/06 Time _____
 Well Diameter MULTI-LEVEL Well Depth (spec.) _____ Well Depth (sounded) 145.00
 Depth to Water (static) 14.60 TOC elev. _____
 G.W. Elev. _____ Maximum Drawdown Limit (if applicable) _____

Initial height of water in casing 130.40 Volume 1.30 gallons
 Total to be evacuated = $3 \times$ Initial Volume 3.91 gallons

Formulas/Conversions
 $r = \text{well radius in ft}$
 $h = \text{ht of water col. in ft}$
 $\text{vol. in cyl.} = \pi r^2 h$
 7.48 gal/l
 $V_{1/2} \text{ casing} = 0.163 \text{ gal/l}$
 $V_{1/4} \text{ casing} = 0.367 \text{ gal/l}$
 $V_{1/8} \text{ casing} = 0.653 \text{ gal/l}$
 $V_{1/16} \text{ casing} = 0.826 \text{ gal/l}$
 $V_{1/32} \text{ casing} = 1.47 \text{ gal/l}$

<u>Stop Time</u>	<u>Start Time</u>	<u>Bailed</u>	<u>Pumped</u>	<u>Cum. Gal.</u>

Pumped or Bailed Dry? Yes No After _____ gallons Recovery Rate _____
 Water color _____ Odor _____
 Description of sediments or material in sample: _____
 Additional Comments: _____

CHEMICAL DATA

Reading No.	1	2	3	4	5	6	7
Time							
Gallons							
Temp. (degree F)	<u>65.8</u>	<u>65.5</u>	<u>65.5</u>				
pH	<u>6.62</u>	<u>6.39</u>	<u>6.40</u>				
EC (umhos/cm)	<u>720</u>	<u>687</u>	<u>688</u>				
Special Conditions							

SAMPLES COLLECTED

Sample ID ml	Bottle/cap	Filtered (size, u)	Preservative (type)	Refrig. (R, NR)	Lab (Init)	Analysis Requested

Bottles: P = Polyethylene; Pp = Polypropylene; C or B = Clear/Brown Glass; O = Other (describe)
 Cap Codes: Py = Polyseal; V = VOA/Teflon septe; M = Metal.

15:40

WATER SAMPLING DATA

Job Name YOKANDA Job Number 98-507-14
 Well Number MW-23d-180 Date _____ Time _____
 Well Diameter 12" Well Depth (spec.) _____ Well Depth (sounded) 180.00
 Depth to Water (static) 13.86 TOC elev. _____
 G.W. Elev. _____ Maximum Drawdown Limit (if applicable) _____

Initial height of water in casing 166.14 Volume 1.66 gallons
 Total to be evacuated = 3 x Initial Volume 4.98 gallons

Formulas/Cross-references
 $r = \text{well radius in ft}$
 $h = \text{ht of water col. in ft}$
 $\text{vol. in cyl.} = \pi r^2 h$
 7.48 gal/ft^3
 $V_{12''} \text{ casing} = 0.163 \text{ gal/ft}$
 $V_{14''} \text{ casing} = 0.367 \text{ gal/ft}$
 $V_{16''} \text{ casing} = 0.653 \text{ gal/ft}$
 $V_{18''} \text{ casing} = 0.826 \text{ gal/ft}$
 $V_{20''} \text{ casing} = 1.47 \text{ gal/ft}$

<u>Stop Time</u>	<u>Start Time</u>	<u>Bailed</u>	<u>Pumped</u>	<u>Cum. Gal.</u>

Pumped or Bailed Dry? Yes No After _____ gallons Recovery Rate _____
 Water color _____ Odor _____
 Description of sediments or material in sample: _____
 Additional Comments: _____

CHEMICAL DATA

Reading No.	1	2	3	4	5	6	7	
Time	_____							
Gallons	_____							
Temp. (degree F)	<u>65.9</u>	<u>65.4</u>	<u>65.1</u>					
pH	<u>6.11</u>	<u>6.13</u>	<u>6.12</u>					
EC (umhos/cm)	<u>517</u>	<u>493</u>	<u>469</u>					
Special Conditions	_____							

SAMPLES COLLECTED

Sample ID ml	Bottle/cap	Filtered (size, u)	Preservative (type)	Refrig. (R, NR)	Lab (Init)	Analysis Requested

Bottles: P = Polyethylene; Pp = Polypropylene; C or B = Clear/Brown Glass; O = Other (describe)
 Cap Codes: Py = Polyseal; V = VOA/Teflon septa; M = Metal

15/55

WATER SAMPLING DATA

Job Name YOKANDA Job Number 98-507-14
 Well Number MN-24 d 25 Date 1/25/06 Time _____
 Well Diameter MULTI-hole Well Depth (spec.) _____ Well Depth (sounded) 25.00
 Depth to Water (static) 13.85 TOC elev. _____
 G.W. Elev. _____ Maximum Drawdown Limit (if applicable) _____

Initial height of water in casing 11.15 Volume 0.11 gallons
 Total to be evacuated = 3 x Initial Volume 0.33 gallons

Formulas/Conversions
 $r = \text{well radius in ft}$
 $h = \text{ht of water col. in ft}$
 $\text{vol. in cyl.} = \pi r^2 h$
 7.48 gal/ft^3
 $V_{1/2} \text{ casing} = 0.163 \text{ gal/ft}$
 $V_{1/4} \text{ casing} = 0.367 \text{ gal/ft}$
 $V_{1/8} \text{ casing} = 0.653 \text{ gal/ft}$
 $V_{1/16} \text{ casing} = 0.826 \text{ gal/ft}$
 $V_{1/32} \text{ casing} = 1.47 \text{ gal/ft}$

<u>Stop Time</u>	<u>Start Time</u>	<u>Bailed</u>	<u>Pumped</u>	<u>Cum. Gal.</u>

Pumped or Bailed Dry? Yes No After _____ gallons Recovery Rate _____
 Water color _____ Odor _____
 Description of sediments or material in sample: _____
 Additional Comments: _____

CHEMICAL DATA

Reading No.	1	2	3	4	5	6	7
Time	_____						
Gallons	_____						
Temp. (degree F)	<u>62.6</u>						
pH	<u>7.04</u>						
EC (umhos/cm)	<u>14.57</u>						
Special Conditions	_____						

SAMPLES COLLECTED

Sample ID ml	Bottle/cap	Filtered (size, u)	Preservative (type)	Refrig. (R, NR)	Lab (Init)	Analysis Requested

Bottles: P = Polyethylene; Pp = Polypropylene; C or B = Clear/Brown Glass; O = Other (describe)
 Cap Codes: Py = Polyseal; V = VOA/Teflon septa; M = Metal.

10:20

WATER SAMPLING DATA

Job Name YOKANDA Job Number 98-507-14
 Well Number MN-24 A 75 Date 1/25/06 Time _____
 Well Diameter MULTI-LEVEL Well Depth (spec.) _____ Well Depth (sounded) 75.00
 Depth to Water (static) 13.90 TOC elev. _____
 G.W. Elev. _____ Maximum Drawdown Limit (if applicable) _____

Initial height of water in casing 61.10 Volume 0.61 gallons
 Total to be evacuated = 3 x Initial Volume 1.83 gallons

Formulas/Conversions
 $r = \text{well radius in ft}$
 $b = \text{ht of water col. in ft}$
 $\text{vol. in cyl.} = \pi r^2 b$
 7.48 gal/l
 $V_{2"} \text{ casing} = 0.163 \text{ gal/l}$
 $V_{3"} \text{ casing} = 0.367 \text{ gal/l}$
 $V_{4"} \text{ casing} = 0.653 \text{ gal/l}$
 $V_{10"} \text{ casing} = 0.826 \text{ gal/l}$
 $V_{12"} \text{ casing} = 1.47 \text{ gal/l}$

Stop Time	Start Time	Bailed	Pumped	Cum. Gal.

Pumped or Bailed Dry? Yes No After _____ gallons Recovery Rate _____
 Water color _____ Odor _____

Description of sediments or material in sample: _____

Additional Comments: _____

CHEMICAL DATA

Reading No.	1	2	3	4	5	6	7
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Time _____

Gallons _____

Temp. (degree F) 61.0 62.1

pH 6.95 6.64

EC (umhos/cm) 433 419

Special Conditions _____

SAMPLES COLLECTED

Sample ID ml	Bottle/cap	Filtered (size, u)	Preservative (type)	Refrig. (R, NR)	Lab (Init)	Analysis Requested
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Bottles: P = Polyethylene; Pp = Polypropylene; C or B = Clear/Brown Glass; O = Other (describe)
 Cap Codes: Py = Polyseal; V = VOA/Teflon septa; M = Metal.

10:30

WATER SAMPLING DATA

Job Name YONANDA Job Number 99-507-14
 Well Number MW-24 d 145 Date 1/25/06 Time _____
 Well Diameter 4.5 FT - LEVEL Well Depth (spec.) _____ Well Depth (sounded) 145.00
 Depth to Water (static) 14.87 TOC elev. _____
 G.W. Elev. _____ Maximum Drawdown Limit (if applicable) _____

Initial height of water in casing 130.13 Volume 1.30 gallons
 Total to be evacuated = 3 x Initial Volume 3.90 gallons

Formulas/Ramifications
 $r = \text{well radius in ft}$
 $h = \text{ht of water col. in ft}$
 $\text{vol. in cyl.} = \pi r^2 h$
 7.48 gal/ft^3
 $V_{1.5''} \text{ casing} = 0.163 \text{ gal/ft}$
 $V_{2''} \text{ casing} = 0.367 \text{ gal/ft}$
 $V_{3''} \text{ casing} = 0.653 \text{ gal/ft}$
 $V_{4.5''} \text{ casing} = 0.826 \text{ gal/ft}$
 $V_{6''} \text{ casing} = 1.47 \text{ gal/ft}$

<u>Stop Time</u>	<u>Start Time</u>	<u>Bailed</u>	<u>Pumped</u>	<u>Cum. Gal.</u>

Pumped or Bailed Dry? Yes No After _____ gallons Recovery Rate _____
 Water color _____ Odor _____

Description of sediments or material in sample: _____

Additional Comments: _____

CHEMICAL DATA

Reading No.	1	2	3	4	5	6	7
Time							
Gallons							
Temp. (degree F)	61.0	61.0	61.0				
pH	6.63	6.68	6.65				
EC (umhos/cm)	803	830	834				
Special Conditions							

SAMPLES COLLECTED

Sample ID ml	Bottle/cap	Filtered (size, u)	Preservative (type)	Refrig. (R, NR)	Lab (Init)	Analysis Requested

Bottles: P = Polyethylene; Pp = Polypropylene; C or B = Clear/Brown Glass; O = Other (describe)
 Cap Codes: Py = Polyseal; V = VOA/Teflon septe; M = Metal.

10:45

WATER SAMPLING DATA

Job Name YALAWAHA Job Number 98-501-14

Well Number MN-24d 180 Date 1/25/06 Well Depth (spec.) 180.00

G.W. Elev. _____ Maximum Drawdown Limit (if applicable) _____

Initial height of water in casing 165.41 Volume 165 gallons Total to be evacuated = $3 \times$ initial volume

Stop Time _____ Start Time _____ Bellied Pumped Cum. Gal.

V_g, sample = 14.7 ml/l V_m, sample = 1126 ml/l V_a, sample = 1163 ml/l V_{casing} = 1163 ml/l V_w, sample = 1163 ml/l

Water color _____ Order _____ Pumpled or Bellied Dry? Yes No After _____ gallons Recovery Rate _____ Additional Comments: _____

Reading No. 1 2 3 4 5 6 7

CHEMICAL DATA

Time _____ Gallons _____ Temp. (degree F) 60.3 61.6 62.2

pH 6.75 6.47 6.32 EC (uhmhos/cm) 452 438 432

SAMPLES COLLECTED

Sample	Bottle/	Filtered	Preservative	(size, u)	(R, NR)	Lab	Analyses	ID ml	cap
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Cap Codes: P = Polyethylene; PP = Polypropylene; G or B = Clear/Brown Glass; M = Metal
Bottle Codes: P = Polyethylene; PP = Polypropylene; G or B = Clear/Brown Glass; O = Other (describable)

10/65

WATER SAMPLING DATA

Job Name YOKANDA Job Number 98-507-14
 Well Number MW-25 d 25 Date 11/25/06 Time _____
 Well Diameter MULTI-LEVEL Well Depth (spec.) _____ Well Depth (sounded) 25.00
 Depth to Water (static) 12.44 TOC elev. _____
 G.W. Elev. _____ Maximum Drawdown Limit (if applicable) _____
 Initial height of water in casing 12.56 Volume 0.12 gallons
 Total to be evacuated = 3 x Initial Volume 0.37 gallons

Formulas/Conversions
 $r = \text{well radius in ft}$
 $h = \text{ht of water col. in ft}$
 $\text{vol. in cyl.} = \pi r^2 h$
 $7.48 \text{ gal}/\text{ft}^3$
 $V_1 = \text{casing} = 0.163 \text{ gal}/\text{ft}$
 $V_2 = \text{casing} = 0.367 \text{ gal}/\text{ft}$
 $V_3 = \text{casing} = 0.653 \text{ gal}/\text{ft}$
 $V_4 = \text{casing} = 0.826 \text{ gal}/\text{ft}$
 $V_5 = \text{casing} = 1.47 \text{ gal}/\text{ft}$

<u>Stop Time</u>	<u>Start Time</u>	<u>Bailed</u>	<u>Pumped</u>	<u>Cum. Gal.</u>

Pumped or Bailed Dry? Yes No After _____ gallons Recovery Rate _____
 Water color _____ Odor _____
 Description of sediments or material in sample: _____
 Additional Comments: _____

CHEMICAL DATA

Reading No.	1	2	3	4	5	6	7
Time							
Gallons							
Temp. (degree F)	66.4						
pH	6.82						
EC (umhos/cm)	2998						
Special Conditions							

SAMPLES COLLECTED

Sample ID ml	Bottle/cap	Filtered (size, u)	Preservative (type)	Refrig. (R, NR)	Lab (Init)	Analysis Requested

Bottles: P = Polyethylene; Pp = Polypropylene; C or B = Clear/Brown Glass; O = Other (describe)
 Cap Codes: Py = Polyseal; V = VOA/Teflon septa; M = Metal

13:20

WATER SAMPLING DATA

Job Name YOHANDA Job Number 98-507-14
 Well Number MW-25d 75 Date 1/25/06 Time _____
 Well Diameter MNTR LEVEL Well Depth (spec.) _____ Well Depth (sounded) 75.00
 Depth to Water (static) 14.32 TOC elev. _____
 G.W. Elev. _____ Maximum Drawdown Limit (if applicable) _____

Initial height of water in casing 60.68 Volume 0.60 gallons
 Total to be evacuated = 3 x Initial Volume 1.82 gallons

Formulas/Conversions
 $r = \text{well radius in ft}$
 $h = \text{ht of water col. in ft}$
 $\text{vol. in cyl.} = \pi r^2 h$
 $7.48 \text{ gal}/\text{ft}^3$
 $V_1 = \text{casing} = 0.163 \text{ gal}/\text{ft}$
 $V_2 = \text{casing} = 0.367 \text{ gal}/\text{ft}$
 $V_3 = \text{casing} = 0.653 \text{ gal}/\text{ft}$
 $V_{12} = \text{casing} = 1.826 \text{ gal}/\text{ft}$
 $V_4 = \text{casing} = 1.47 \text{ gal}/\text{ft}$

Stop Time	Start Time	Bailed	Pumped	Cum. Gal.

Pumped or Bailed Dry? Yes No After _____ gallons Recovery Rate _____
 Water color _____ Odor _____

Description of sediments or material in sample: _____

Additional Comments: _____

CHEMICAL DATA

Reading No.	1	2	3	4	5	6	7
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Time _____

Gallons _____

Temp. (degree F) 63.7 64.4

pH 6.80 6.51

EC (umhos/cm) 1344 1418

Special Conditions _____

SAMPLES COLLECTED

Sample ID ml	Bottle/cap	Filtered (size, u)	Preservative (type)	Refrig. (R, NR)	Lab (Init)	Analysis Requested
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Bottles: P = Polyethylene; Pp = Polypropylene; C or B = Clear/Brown Glass; O = Other (describe)
 Cap Codes: Py = Polyseal; V = VOA/Teflon septa; M = Metal.

13:30

WATER SAMPLING DATA

Job Name YOKANO A Job Number 99-507-14
 Well Number MW-25 d 145 Date 1/25/06 Time _____
 Well Diameter MULTI-LEVEL Well Depth (spec.) _____ Well Depth (sounded) 145.00
 Depth to Water (static) 14.62 TOC elev. _____
 G.W. Elev. _____ Maximum Drawdown Limit (if applicable) _____

Initial height of water in casing 130.38 Volume 1.30 gallons
 Total to be evacuated = $3 \times$ Initial Volume 3.91 gallons

Formulas/Conversions
 $r = \text{well radius in ft}$
 $h = \text{ht of water col. in ft}$
 $\text{vol. in cyl.} = \pi r^2 h$
 $7.48 \text{ gal}/\text{ft}^3$
 $V_1 = \text{casing} = 0.163 \text{ gal}/\text{ft}$
 $V_2 = \text{casing} = 0.367 \text{ gal}/\text{ft}$
 $V_3 = \text{casing} = 0.653 \text{ gal}/\text{ft}$
 $V_{12} = \text{casing} = 0.826 \text{ gal}/\text{ft}$
 $V_s = \text{casing} = 1.47 \text{ gal}/\text{ft}$

Stop Time	Start Time	Bailed	Pumped	Cum. Gal.

Pumped or Bailed Dry? Yes No After _____ gallons Recovery Rate _____
 Water color _____ Odor _____
 Description of sediments or material in sample: _____
 Additional Comments: _____

CHEMICAL DATA

Reading No.	1	2	3	4	5	6	7
Time	_____						
Gallons	_____						
Temp. (degree F)	<u>63.0</u>	<u>63.4</u>	<u>63.9</u>				
pH	<u>6.64</u>	<u>6.61</u>	<u>6.72</u>				
EC (umhos/cm)	<u>726</u>	<u>708</u>	<u>704</u>				
Special Conditions	_____						

SAMPLES COLLECTED

Sample ID ml	Bottle/cap	Filtered (size, u)	Preservative (type)	Refrig. (R, NR)	Lab (Init)	Analysis Requested

Bottles: P = Polyethylene; Pp = Polypropylene; C or B = Clear/Brown Glass; O = Other (describe)
 Cap Codes: Py = Polyseal; V = VOA/Teflon septa; M = Metal.

13:40

WATER SAMPLING DATA

Job Name YOLANDA Job Number 98-507-14
 Well Number MW-25 & 180 Date 11/25/06 Time _____
 Well Diameter 12-inches Well Depth (spec.) _____ Well Depth (sounded) 180.00
 Depth to Water (static) 14.35 TOC elev. _____
 G.W. Elev. _____ Maximum Drawdown Limit (if applicable) _____

Initial height of water in casing 165.65 Volume 1.65 gallons
 Total to be evacuated = $3 \times$ Initial Volume 4.96 gallons

Definitions/Conversions
 $r =$ well radius in ft
 $h =$ ht of water cyl. in ft
 $\text{vol. in cyl.} = \pi r^2 h$
 7.48 gal/l
 $V_2 \text{ " casing} = 0.163 \text{ gal/l}$
 $V_3 \text{ " casing} = 0.367 \text{ gal/l}$
 $V_4 \text{ " casing} = 0.653 \text{ gal/l}$
 $V_{10} \text{ " casing} = 0.826 \text{ gal/l}$
 $V_{12} \text{ " casing} = 1.47 \text{ gal/l}$

<u>Stop Time</u>	<u>Start Time</u>	<u>Bailed</u>	<u>Pumped</u>	<u>Cum. Gal.</u>

Pumped or Bailed Dry? Yes No After _____ gallons Recovery Rate _____
 Water color _____ Odor _____
 Description of sediments or material in sample: _____
 Additional Comments: _____

CHEMICAL DATA

Reading No.	1	2	3	4	5	6	7
Time							
Gallons							
Temp. (degree F)	<u>64.4</u>	<u>64.1</u>	<u>64.4</u>				
pH	<u>6.54</u>	<u>6.52</u>	<u>6.50</u>				
EC (umhos/cm)	<u>498</u>	<u>525</u>	<u>524</u>				

Special Conditions _____

SAMPLES COLLECTED

Sample ID ml	Bottle/ cap	Filtered (size, u)	Preservative (type)	Refrig. (R, NR)	Lab (Init)	Analysis Requested

Bottles: P = Polyethylene; Pp = Polypropylene; C or B = Clear/Brown Glass; O = Other (describe)
 Cap Codes: Py = Polyseal; V = VOA/Teflon septe; M = Metal.

13:50

WATER SAMPLING DATA

Job Name YOKANDA Job Number 98-507-14
 Well Number MN-258 230 Date 1/25/06 Time _____
 Well Diameter MULTI-LEVEL Well Depth (spec.) _____ Well Depth (sounded) 230.00
 Depth to Water (static) 14.55 TOC elev. _____
 G.W. Elev. _____ Maximum Drawdown Limit (if applicable) _____
 Initial height of water in casing 215.45 Volume 2.15 gallons
 Total to be evacuated = 3 x Initial Volume 6.46 gallons

Formulas/Conversions

r = well radius in ft.
 h = ht of water gal. in it
 vol. in cyl. = $\pi r^2 h$
 $7.48 \text{ gal}/\text{ft}^3$
 $V_{1''} \text{ casing} = 0.163 \text{ gal}/\text{ft}$
 $V_{2''} \text{ casing} = 0.367 \text{ gal}/\text{ft}$
 $V_{3''} \text{ casing} = 0.653 \text{ gal}/\text{ft}$
 $V_{4''} \text{ casing} = 0.826 \text{ gal}/\text{ft}$
 $V_{5''} \text{ casing} = 1.47 \text{ gal}/\text{ft}$

Stop Time	Start Time	Bailed	Pumped	Cum. Gal.

Pumped or Bailed Dry? Yes No After _____ gallons Recovery Rate _____
 Water color _____ Odor _____
 Description of sediments or material in sample: _____
 Additional Comments: _____

CHEMICAL DATA

Reading No.	1	2	3	4	5	6	7
Time							
Gallons							
Temp. (degree F)	<u>63.7</u>	<u>64.0</u>	<u>64.5</u>				
pH	<u>6.49</u>	<u>6.65</u>	<u>6.64</u>				
EC (umhos/cm)	<u>636</u>	<u>722</u>	<u>745</u>				
Special Conditions							

SAMPLES COLLECTED

Sample ID ml	Bottle/cap	Filtered (size, u)	Preservative (type)	Refrig. (R, NR)	Lab (Init)	Analysis Requested

Bottles: P = Polyethylene; Pp = Polypropylene; C or B = Clear/Brown Glass; O = Other (describe)

Cap Codes: Py = Polyseal; V = VOA/Teflon septa; M = Metal.

14:05

WATER SAMPLING DATA

Job Name YOLANDA Job Number 98-507-14
 Well Number MW-28d25 Date 1/27/06 Time _____
 Well Diameter MULTI-LEVEL Well Depth (spec.) _____ Well Depth (sounded) 25.00
 Depth to Water (static) 15.97 TOC elev. _____
 G.W. Elev. _____ Maximum Drawdown Limit (if applicable) _____
 Initial height of water in casing 9.03 Volume 009 gallons
 Total to be evacuated = $3 \times$ Initial Volume 0.87 gallons

Formulas/Conversions

r = well radius in ft
 h = ht of water col. in ft
 vol in cyl. = $\pi r^2 h$
 7.48 gal/ft³
 $V_{1/2}$ " casing = 0.163 gal/ft
 $V_{1/4}$ " casing = 0.362 gal/ft
 $V_{3/4}$ " casing = 0.663 gal/ft
 $V_{1\frac{1}{2}}$ " casing = 0.826 gal/ft
 $V_2"$ casing = 1.47 gal/ft

<u>Stop Time</u>	<u>Start Time</u>	<u>Bailed</u>	<u>Pumped</u>	<u>Cum. Gal.</u>

Pumped or Bailed Dry? Yes No After _____ gallons Recovery Rate _____
 Water color _____ Odor _____
 Description of sediments or material in sample: _____
 Additional Comments: _____

CHEMICAL DATA

Reading No.	1	2	3	4	5	6	7
Time	_____						
Gallons	_____						
Temp. (degree F)	<u>66.7</u>						
pH	<u>6.86</u>						
EC (umhos/cm)	<u>10.38</u>						
Special Conditions	_____						

SAMPLES COLLECTED

Sample ID ml	Bottle/ cap	Filtered (size, u)	Preservative (type)	Refrig. (R, NR)	Lab (Init)	Analysis Requested

Bottles: P = Polyethylene; Pp = Polypropylene; C or B = Clear/Brown Glass; O = Other (describe)
 Cap Codes: Py = Polysteel; V = VOA/Teflon septa; M = Metal.

11:45

WATER SAMPLING DATA

Job Name YONANDA Job Number 98-507-14
 Well Number RW-28d25 Date 1/27/06 Time _____
 Well Diameter MULTI-LEVEL Well Depth (spec.) _____ Well Depth (sounded) 75.00
 Depth to Water (static) 15.51 TOC elev. _____
 G.W. Elev. _____ Maximum Drawdown Limit (if applicable) _____
 Initial height of water in casing 59.49 Volume 0.59 gallons
 Total to be evacuated = $3 \times$ Initial Volume 1.78 gallons

Formulas/Conversions

r = well radius in ft
 h = ht of water col. in ft
 vol. in cyl. = $\pi r^2 h$
 $7.48 \text{ gal}/\text{ft}^3$
 $V_{2"} \text{ casing} = 0.163 \text{ gal}/\text{ft}$
 $V_{3"} \text{ casing} = 0.367 \text{ gal}/\text{ft}$
 $V_{4"} \text{ casing} = 0.651 \text{ gal}/\text{ft}$
 $V_{5"} \text{ casing} = 0.826 \text{ gal}/\text{ft}$
 $V_{6"} \text{ casing} = 1.47 \text{ gal}/\text{ft}$

<u>Stop Time</u>	<u>Start Time</u>	<u>Bailed</u>	<u>Pumped</u>	<u>Cum. Gal.</u>

Pumped or Bailed Dry? Yes No After _____ gallons Recovery Rate _____
 Water color _____ Odor _____
 Description of sediments or material in sample: _____
 Additional Comments: _____

CHEMICAL DATA

Reading No.	1	2	3	4	5	6	7
Time	_____						
Gallons	_____						
Temp. (degree F)	<u>64.2 63.8</u>						
pH	<u>6.48 6.65</u>						
EC (umhos/cm)	<u>750 726</u>						
Special Conditions	_____						

SAMPLES COLLECTED

Sample ID ml	Bottle/cap	Filtered (size, u)	Preservative (type)	Refrig. (R, NR)	Lab (Init)	Analysis Requested

Bottles: P = Polyethylene; Pp = Polypropylene; C or B = Clear/Brown Glass; O = Other (describe)
 Cap Codes: Py = Polyseal; V = VOA/Teflon septe; M = Metal.

1155

WATER SAMPLING DATA

Job Name YOKANDA Job Number 98-507-14
 Well Number MN-28d 145 Date 1/27/06 Time _____
 Well Diameter MULTI-LEVEL Well Depth (spec.) _____ Well Depth (sounded) 45.00
 Depth to Water (static) 15.30 TOC elev. _____
 G.W. Elev. _____ Maximum Drawdown Limit (if applicable) _____
 Initial height of water in casing 129.70 Volume 1.29 gallons
 Total to be evacuated = 3 x Initial Volume 3.89 gallons

Formulas/Conversions

r = well radius in ft
 h = ht of water col. in ft
 vol. in cyl. = $\pi r^2 h$
 $7.48 \text{ gal}/\text{ft}^3$
 $V_{12''}$ casing = $0.163 \text{ gal}/\text{ft}$
 $V_{16''}$ casing = $0.367 \text{ gal}/\text{ft}$
 $V_{20''}$ casing = $0.653 \text{ gal}/\text{ft}$
 $V_{24''}$ casing = $0.826 \text{ gal}/\text{ft}$
 $V_{30''}$ casing = $1.47 \text{ gal}/\text{ft}$

Stop Time	Start Time	Bailed	Pumped	Cum. Gal

Pumped or Bailed Dry? Yes No After _____ gallons Recovery Rate _____
 Water color _____ Odor _____
 Description of sediments or material in sample: _____
 Additional Comments: _____

CHEMICAL DATA

Reading No.	1	2	3	4	5	6	7
Time							
Gallons							
Temp. (degree F)	<u>63.4</u>	<u>64.4</u>	<u>64.7</u>				
pH	<u>6.32</u>	<u>6.45</u>	<u>6.51</u>				
EC (umhos/cm)	<u>629</u>	<u>622</u>	<u>601</u>				

Special Conditions: _____

SAMPLES COLLECTED

Sample ID ml	Bottle/cap	Filtered (size, u)	Preservative (type)	Refrig. (R, NR)	Lab (Init)	Analysis Requested

Bottles: P = Polyethylene; Pp = Polypropylene; C or B = Clear/Brown Glass; O = Other (describe)
 Cap Codes: Py = Polysseal; V = VOA/Teflon septe; M = Metal.

12°10

WATER SAMPLING DATA

Job Name YOLANDA Job Number 98-507-14
 Well Number MW-28d180 Date 1/27/06 Time _____
 Well Diameter MULTI-LEVEL Well Depth (spec.) _____ Well Depth (sounded) 180.00
 Depth to Water (static) 15.24 TOC elev. _____
 G.W. Elev. _____ Maximum Drawdown Limit (if applicable) _____
 Initial height of water in casing 164.76 Volume 1.64 gallons
 Total to be evacuated = $3 \times$ Initial Volume 4.94 gallons

Formulas/Conversions

 $r = \text{well radius in ft}$
 $h = \text{ht of water col. in ft}$
 $\text{vol. in cyl.} = \pi r^2 h$
 $7.48 \text{ gal}/\text{ft}^3$
 $V_{12''} \text{ casing} = 0.163 \text{ gal}/\text{ft}$
 $V_{12''} \text{ casing} = 0.367 \text{ gal}/\text{ft}$
 $V_{12''} \text{ casing} = 0.633 \text{ gal}/\text{ft}$
 $V_{12''} \text{ casing} = 0.826 \text{ gal}/\text{ft}$
 $V_{12''} \text{ casing} = 1.47 \text{ gal}/\text{ft}$

Stop Time	Start Time	Bailed	Pumped	Cum. Gal.

Pumped or Bailed Dry? Yes No After _____ gallons Recovery Rate _____
 Water color _____ Odor _____
 Description of sediments or material in sample: _____
 Additional Comments: _____

CHEMICAL DATA

Reading No.	1	2	3	4	5	6	7
Time							
Gallons							
Temp. (degree F)	<u>64.9</u>	<u>64.7</u>	<u>65.0</u>				
pH	<u>6.22</u>	<u>6.32</u>	<u>6.32</u>				
EC (umhos/cm)	<u>560</u>	<u>552</u>	<u>518</u>				
Special Conditions							

SAMPLES COLLECTED

Sample ID ml	Bottle/cap	Filtered (size, u)	Preservative (type)	Refrig. (R, NR)	Lab (Init)	Analysis Requested

Bottles: P = Polyethylene; Pp = Polypropylene; C or B = Clear/Brown Glass; O = Other (describe)
 Cap Codes: Py = Polyseal; V = VOA/Teflon septa; M = Metal.

14,20

WATER SAMPLING DATA

Job Name YORANDA Job Number 98-507-14
 Well Number MW-29 625 Date 1/27/06 Time _____
 Well Diameter MULTI-level Well Depth (spec.) _____ Well Depth (sounded) 25.00
 Depth to Water (static) 13.47 TOC elev. _____
 G.W. Elev. _____ Maximum Drawdown Limit (if applicable) _____
 Initial height of water in casing 11.53 Volume 0.11 gallons
 Total to be evacuated = 3 x Initial Volume 0.34 gallons

Formulas/Conversions

r = well radius in ft
 h = ht of water cyl. in ft
 vol. in cyl. = $\pi r^2 h$
 $7.48 \text{ gal}/\text{ft}^3$
 $V_{1/2}'' \text{ casing} = 0.163 \text{ gal}/\text{ft}$
 $V_1'' \text{ casing} = 0.367 \text{ gal}/\text{ft}$
 $V_{1/2}'' \text{ casing} = 0.653 \text{ gal}/\text{ft}$
 $V_1'' \text{ casing} = 0.826 \text{ gal}/\text{ft}$
 $V_2'' \text{ casing} = 1.47 \text{ gal}/\text{ft}$

Stop Time	Start Time	Bailed	Pumped	Cum. Gal.

Pumped or Bailed Dry? Yes No After _____ gallons Recovery Rate _____
 Water color _____ Odor _____
 Description of sediments or material in sample: _____
 Additional Comments: _____

CHEMICAL DATA

Reading No.	1	2	3	4	5	6	7
Time							
Gallons							
Temp. (degree F)	<u>63.9</u>						
pH	<u>6.89</u>						
EC ($\mu\text{mhos}/\text{cm}$)	<u>1160</u>						
Special Conditions							

SAMPLES COLLECTED

Sample ID ml	Bottle/cap	Filtered (size, u)	Preservative (type)	Refrig. (R, NR)	Lab (Init)	Analysis Requested

Bottles: P = Polyethylene; Pp = Polypropylene; C or B = Clear/Brown Glass; O = Other (describe)
 Cap Codes: Py = Polyseal; V = VOA/Teflon septa; M = Metal.

10:35

WATER SAMPLING DATA

Job Name YOLANDA Job Number 98-507-14Well Number MW-29d75 Date 11/87/06 Time _____Well Diameter MULTI-LEVEL Well Depth (spec.) _____ Well Depth (sounded) 75.00Depth to Water (static) 14.24 TOC elev. _____

G.W. Elev. _____ Maximum Drawdown Limit (if applicable) _____

Initial height of water in casing 60.76 Volume 0.60 gallons
Total to be evacuated = 3 x Initial Volume 1.82 gallons

Formulas/Conversions

 $r = \text{well radius in ft}$ $h = \text{ht of water col. in ft}$ $\text{vol. in cyl.} = \pi r^2 h$ $7.48 \text{ gal}/\text{ft}^3$ $V_{1/2} \text{ casing} = 0.163 \text{ gal}/\text{ft}$ $V_{1/4} \text{ casing} = 0.367 \text{ gal}/\text{ft}$ $V_{1/8} \text{ casing} = 0.653 \text{ gal}/\text{ft}$ $V_{1/16} \text{ casing} = 0.826 \text{ gal}/\text{ft}$ $V_{1/32} \text{ casing} = 1.47 \text{ gal}/\text{ft}$

Stop Time _____ Start Time _____ Bailed _____ Pumped _____ Cum. Gal. _____

Pumped or Bailed Dry? Yes No After _____ gallons Recovery Rate _____

Water color _____ Odor _____

Description of sediments or material in sample: _____

Additional Comments: _____

CHEMICAL DATA

Reading No. 1 2 3 4 5 6 7

Time _____

Gallons _____

Temp. (degree F) 61.8 62.5pH 6.41 7.02EC (umhos/cm) 632 614

Special Conditions _____

SAMPLES COLLECTED

Sample ID ml	Bottle/ cap	Filtered (size, u)	Preservative (type)	Refrig. (R, NR)	Lab (Init)	Analysis Requested
_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____

Bottles: P = Polyethylene; Pp = Polypropylene; C or B = Clear/Brown Glass; O = Other (describe)

Cap Codes: Py = Polyseal; V = VOA/Teflon septa; M = Metal.

10/45

WATER SAMPLING DATA

Job Name YOHANDA Job Number 98-507-14
 Well Number MN-29d145 Date 11/27/06 Time _____
 Well Diameter MULTI-level Well Depth (spec.) _____ Well Depth (sounded) 145.00
 Depth to Water (static) 20.79 TOC elev. _____
 G.W. Elev. _____ Maximum Drawdown Limit (if applicable) _____
 Initial height of water in casing 124.21 Volume 1.24 gallons
 Total to be evacuated = 3 x Initial Volume 3.72 gallons

Formulas/Conversions

r = well radius in ft
 h = ht of water col. in ft
 vol. in cyl. = $\pi r^2 h$

7.48 gal/ft³

V_{1"} casing = 0.163 gal/ft

V_{2"} casing = 0.367 gal/ft

V_{3"} casing = 0.653 gal/ft

V_{4"} casing = 0.826 gal/ft

V_{5"} casing = 1.47 gal/ft

Stop Time	Start Time	Bailed	Pumped	Cum. Gal.

Pumped or Bailed Dry? Yes No After _____ gallons Recovery Rate _____

Water color _____ Odor _____

Description of sediments or material in sample: _____

Additional Comments: _____

CHEMICAL DATA

Reading No.	1	2	3	4	5	6	7
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Time _____

Gallons _____

Temp. (degree F) 61.7 62.2 62.8

pH 6.37 6.30 6.14

EC (umhos/cm) 481 480 469

Special Conditions _____

SAMPLES COLLECTED

Sample ID ml	Bottle/cap	Filtered (size, u)	Preservative (type)	Refrig. (R, NR)	Lab (Init)	Analysis Requested
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Bottles: P = Polyethylene; Pp = Polypropylene; C or B = Clear/Brown Glass; O = Other (describe)
 Cap Codes: Py = Polyseal; V = VOA/Teflon septa; M = Metal.

10/55

WATER SAMPLING DATA

Job Name YONANDA Job Number 98-507-14
 Well Number MW-29d 180 Date 1/27/06 Time _____
 Well Diameter MULTI-LEVEL Well Depth (spec.) _____ Well Depth (sounded) 180.00
 Depth to Water (static) 20.97' TOC elev. _____
 G.W. Elev. _____ Maximum Drawdown Limit (if applicable) _____

Initial height of water in casing 159.23 Volume 1.59 gallons
 Total to be evacuated = $3 \times$ Initial Volume 4.77 gallons

Stop Time	Start Time	Bailed	Pumped	Cum. Gal.

Pumped or Bailed Dry? Yes No After _____ gallons Recovery Rate _____
 Water color _____ Odor _____

Description of sediments or material in sample: _____

Additional Comments: _____

CHEMICAL DATA

Reading No.	1	2	3	4	5	6	7
Time							

Gallons							
---------	--	--	--	--	--	--	--

Temp. (degree F)	<u>62.6</u>	<u>63.0</u>	<u>63.1</u>				
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pH	<u>6.14</u>	<u>6.08</u>	<u>5.96</u>				
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EC (umhos/cm)	<u>351</u>	<u>344</u>	<u>334</u>				
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Special Conditions: _____

SAMPLES COLLECTED

Sample ID ml	Bottle/ cap	Filtered (size, u)	Preservative (type)	Refrig. (R, NR)	Lab (Init)	Analysis Requested

Bottles: P = Polyethylene; Pp = Polypropylene; C or B = Clear/Brown Glass; O = Other (describe)
 Cap Codes: Py = Polyseal; V = VOA/Teflon septa; M = Metal.

11:05

WATER SAMPLING DATA

Job Name YOKANDA Job Number 98-507-14
 Well Number MW-30625 Date 1/26/06 Time _____
 Well Diameter 14.55 - 16.56 Well Depth (spec.) _____ Well Depth (sounded) 25.00
 Depth to Water (static) 13.45 TOC elev. _____
 G.W. Elev. _____ Maximum Drawdown Limit (if applicable) _____

Initial height of water in casing 11.55 Volume 0.11 gallons
 Total to be evacuated = 3 x Initial Volume 0.34 gallons

Formulas/Conversions $r = \text{well radius in ft}$ $h = \text{ht of water col. in ft}$ $\text{vol. in cyl.} = \pi r^2 h$ $7.48 \text{ gal}/\text{ft}^3$ $V_1 = \text{casing} = 0.163 \text{ gal}/\text{ft}$ $V_2 = \text{casing} = 0.367 \text{ gal}/\text{ft}$ $V_3 = \text{casing} = 0.653 \text{ gal}/\text{ft}$ $V_4 = \text{casing} = 0.826 \text{ gal}/\text{ft}$ $V_5 = \text{casing} = 1.47 \text{ gal}/\text{ft}$

<u>Stop Time</u>	<u>Start Time</u>	<u>Bailed</u>	<u>Pumped</u>	<u>Cum. Gal</u>

Pumped or Bailed Dry? Yes No After _____ gallons Recovery Rate _____
 Water color _____ Odor _____

Description of sediments or material in sample: _____

Additional Comments: _____

CHEMICAL DATA

Reading No.	1	2	3	4	5	6	7
-------------	---	---	---	---	---	---	---

Time _____

Gallons _____

Temp. (degree F) 63.4

pH 6.98

EC ($\mu\text{mhos/cm}$) 759

Special Conditions _____

SAMPLES COLLECTED

Sample ID ml	Bottle/ cap	Filtered (size, u)	Preservative (type)	Refrig. (R, NR)	Lab (Init)	Analysis Requested
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Bottles: P = Polyethylene; Pp = Polypropylene; C or B = Clear/Brown Glass; O = Other (describe)
 Cap Codes: Py = Polyseal; V = VOA/Teflon septa; M = Metal

11:40

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WATER SAMPLING DATA

Job Name YOKANDA Job Number 98-507-14
 Well Number MW-30d 75 Date 11/25/06 Time _____
 Well Diameter MULTI-LEVEL Well Depth (spec.) _____ Well Depth (sounded) 75.00
 Depth to Water (static) 14.00 TOC elev. _____
 G.W. Elev. _____ Maximum Drawdown Limit (if applicable) _____
 Initial height of water in casing 61.00 Volume 0.61 gallons
 Total to be evacuated = 3 x Initial Volume 1.83 gallons

Formulas/Conversions $r = \text{well radius in ft}$ $b = \text{ht of water col. in ft}$
 $\text{vol. in cyl.} = \pi r^2 b$ 7.48 gal/ft^3 $V_{1/2}'' \text{ casing} = 0.163 \text{ gal/ft}$ $V_{1/4}'' \text{ casing} = 0.367 \text{ gal/ft}$ $V_{1/8}'' \text{ casing} = 1.653 \text{ gal/ft}$ $V_{1/16}'' \text{ casing} = 0.826 \text{ gal/ft}$ $V_{1/32}'' \text{ casing} = 1.47 \text{ gal/ft}$

<u>Stop Time</u>	<u>Start Time</u>	<u>Bailed</u>	<u>Pumped</u>	<u>Cum. Gal.</u>

Pumped or Bailed Dry? Yes No After _____ gallons Recovery Rate _____

Water color _____ Odor _____

Description of sediments or material in sample: _____

Additional Comments: _____

CHEMICAL DATA

Reading No.	1	2	3	4	5	6	7
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Time _____

Gallons _____

Temp. (degree F) 62.4 63.3

pH 6.70 6.42

EC (umhos/cm) 753 752

Special Conditions _____

SAMPLES COLLECTED

Sample ID ml	Bottle/cap	Filtered (size, u)	Preservative (type)	Refrig. (R, NR)	Lab (Init)	Analysis Requested
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Bottles: P = Polyethylene; Pp = Polypropylene; C or B = Clear/Brown Glass; O = Other (describe)

Cap Codes: Py = Polyseal; V = VOA/Teflon septe; M = Metal.

11/150

WATER SAMPLING DATA

Job Name YOKANDAJob Number 98-507-14Well Number MW-30d 145 Date 1/25/06

Time _____

Well Diameter MULTI-LEVEL Well Depth (spec.) _____Well Depth (sounded) 145.00Depth to Water (static) 15.00 TOC elev. _____

G.W. Elev. _____ Maximum Drawdown Limit (if applicable) _____

Initial height of water in casing 130.00 Volume 1.30 gallonsTotal to be evacuated = 3 x Initial Volume 3.90 gallons

Formulas/Conversions

 $r = \text{well radius in ft}$ $h = \text{ht of water cyl. in ft}$ $\text{vol. in cyl.} = \pi r^2 h$ 7.48 gal/ft^3 $V_{12''} \text{ casing} = 0.163 \text{ gal/ft}$ $V_{14''} \text{ casing} = 0.367 \text{ gal/ft}$ $V_{16''} \text{ casing} = 0.653 \text{ gal/ft}$ $V_{18''} \text{ casing} = 0.826 \text{ gal/ft}$ $V_{20''} \text{ casing} = 1.47 \text{ gal/ft}$

<u>Stop Time</u>	<u>Start Time</u>	<u>Bailed</u>	<u>Pumped</u>	<u>Cum. Gal.</u>

Pumped or Bailed Dry? Yes No After _____ gallons Recovery Rate _____

Water color _____ Odor _____

Description of sediments or material in sample: _____

Additional Comments: _____

CHEMICAL DATA

Reading No. 1 2 3 4 5 6 7

Time _____

Gallons _____

Temp. (degree F) 63.5 63.6 63.4pH 6.54 6.48 6.41EC (umhos/cm) 732 727 729

Special Conditions _____

SAMPLES COLLECTED

Sample ID ml	Bottle/ cap	Filtered (size, u)	Preservative (type)	Refrig. (R, NR)	Lab (Init)	Analysis Requested

Bottles: P = Polyethylene; Pp = Polypropylene; C or B = Clear/Brown Glass; O = Other (describe)

Cap Codes: Py = Polyseal; V = VOA/Teflon septa; M = Metal.

12/10

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WATER SAMPLING DATA

Job Name YOLANDA Job Number 98-507-14
 Well Number MW-30 d 180 Date 1/25/06 Time _____
 Well Diameter MULTI-level Well Depth (spec.) _____ Well Depth (sounded) 180.00
 Depth to Water (static) 14.38 TOC elev. _____
 G.W. Elev. _____ Maximum Drawdown Limit (if applicable) _____

Initial height of water in casing 165.62 Volume 1.65 gallons
 Total to be evacuated = 3 x Initial Volume 4.96 gallons

Equivalents
 $r = \text{well radius in ft}$
 $h = \text{ht of water col. in ft}$
 $\text{vol. in cyl.} = \pi r^2 h$
 7.48 gal/ft^3
 $V_1 \text{ casing} = 0.163 \text{ gal/ft}$
 $V_2 \text{ casing} = 0.367 \text{ gal/ft}$
 $V_3 \text{ casing} = 0.653 \text{ gal/ft}$
 $V_{12} \text{ casing} = 0.826 \text{ gal/ft}$
 $V_x \text{ casing} = 1.47 \text{ gal/ft}$

Stop Time	Start Time	Bailed	Pumped	Cum. Gal.

Pumped or Bailed Dry? Yes No After _____ gallons Recovery Rate _____
 Water color _____ Odor _____
 Description of sediments or material in sample: _____
 Additional Comments: _____

CHEMICAL DATA

Reading No.	1	2	3	4	5	6	7
Time							
Gallons							
Temp. (degree F)	<u>62.7</u>	<u>63.5</u>	<u>63.7</u>				
pH	<u>6.64</u>	<u>6.65</u>	<u>6.62</u>				
EC (umhos/cm)	<u>955</u>	<u>1021</u>	<u>1036</u>				

Special Conditions _____

SAMPLES COLLECTED

Sample ID ml	Bottle/ cap	Filtered (size, u)	Preservative (type)	Refrig. (R, NR)	Lab (Init)	Analysis Requested

Bottles: P = Polyethylene; Pp = Polypropylene; C or B = Clear/Brown Glass; O = Other (describe)
 Cap Codes: Py = Polyseal; V = VOA/Teflon septe; M = Metal

12:15

WATER SAMPLING DATA

Job Name YOLANDA Job Number 98-507-14
 Well Number MW-30d 230 Date 1/25/06 Time _____
 Well Diameter 14.50 - 16.50 Well Depth (spec.) _____ Well Depth (sounded) 230.00
 Depth to Water (static) 14.94 TOC elev. _____
 G.W. Elev. _____ Maximum Drawdown Limit (if applicable) _____

Initial height of water in casing 215.06 Volume 2.15 gallons
 Total to be evacuated = $3 \times$ Initial Volume 6.45 gallons

Formulas/Conversions:
 $r = \text{well radius in ft}$
 $h = \text{ht of water col. in ft}$
 $\text{vol. in cyl.} = \pi r^2 h$
 7.48 gal/ft^3
 $V_{1/2} \text{ casing} = 0.163 \text{ gal/ft}$
 $V_{1/4} \text{ casing} = 0.367 \text{ gal/ft}$
 $V_{1/8} \text{ casing} = 0.653 \text{ gal/ft}$
 $V_{1/16} \text{ casing} = 0.826 \text{ gal/ft}$
 $V_{1/32} \text{ casing} = 1.47 \text{ gal/ft}$

Stop Time	Start Time	Bailed	Pumped	Cum. Gal.

Pumped or Bailed Dry? Yes No After _____ gallons Recovery Rate _____
 Water color _____ Odor _____
 Description of sediments or material in sample: _____
 Additional Comments: _____

CHEMICAL DATA

Reading No.	1	2	3	4	5	6	7
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Time _____

Gallons _____

Temp. (degree F) 62.4 62.6 63.0

pH 6.86 6.70 6.54

EC ($\mu\text{mhos/cm}$) 553 586 627

Special Conditions _____

SAMPLES COLLECTED

Sample ID ml	Bottle/cap	Filtered (size, u)	Preservative (type)	Refrig. (R, NR)	Lab (Init)	Analysis Requested
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Bottles: P = Polyethylene; Pp = Polypropylene; C or B = Clear/Brown Glass; O = Other (describe)
 Cap Codes: Py = Polyseal; V = VOA/Teflon septa; M = Metal.

12:30

APPENDIX E

ECM STANDARD OPERATING PROCEDURE

ECM STANDARD OPERATING PROCEDURE

GROUND WATER SAMPLING

The following describes sampling procedures used by ECM field personnel to collect and handle ground water samples. Before samples are collected, careful consideration is given to the type of analysis to be performed so that precautions are taken to prevent loss of volatile components or contamination of the sample, and to preserve the sample for subsequent analysis. Wells will be sampled no less than 24 hours after well development. Collection methods specific to ground water sampling are presented below.

Prior to sampling, each well is purged of a minimum of three well casing volumes of water using a steam-cleaned PVC bailer, or a pre-cleaned pump. Temperature, pH and electrical conductivity are measured at least three times during purging. Purging is continued until these parameters have stabilized (i.e., changes in temperature, pH or conductivity do not exceed 10%).

Ground water samples are collected from the wells/borings with steam-cleaned or disposable Teflon bailers. The water samples are decanted into the appropriate container for the analysis to be performed. Pre-preserved sample containers may be used or the analytic laboratory may add preservative to the sample upon arrival. Duplicate samples are collected from each well as a back-up sample and/or to provide quality control. The samples are labeled to include the project number, sample ID, date, preservative, and the field person's initials. The samples are placed in polyethylene bags and in an ice chest (maintained at 4°C with blue ice or ice) for transport under chain-of-custody to the laboratory.

The chain-of-custody form includes the project number, analysis requested, sample ID, date analysis and the ECM field person's name. The form is signed and dated (with the transfer time) by each person who yields or receives the samples beginning with the field personnel and ending with the laboratory personnel.